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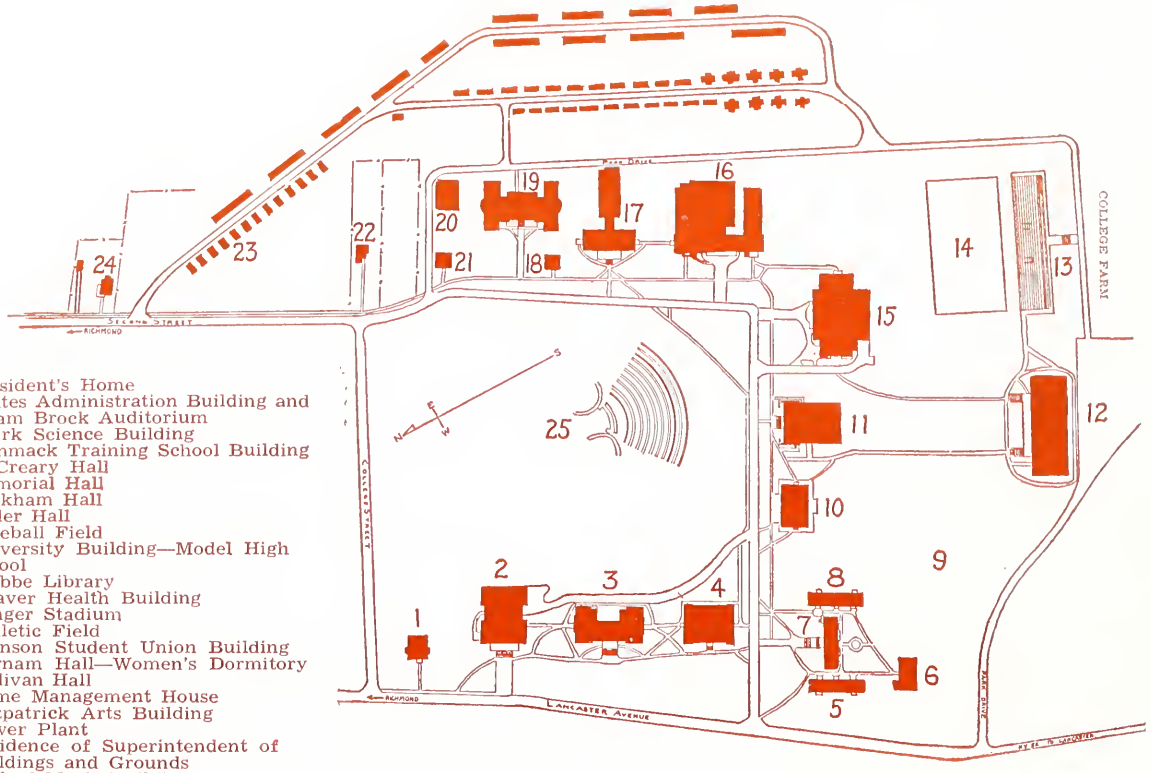
EASTERN KENTUCKY REVIEW

VOL. XXXVII JULY, 1946 NO. 1



1. President's Home
2. Coates Administration Building and Hiram Brock Auditorium
3. Roark Science Building
4. Cammack Training School Building
5. McCreary Hall
6. Memorial Hall
7. Beckham Hall
8. Miller Hall
9. Baseball Field
10. University Building—Model High School
11. Crabbe Library
12. Weaver Health Building
13. Hanger Stadium
14. Athletic Field
15. Johnson Student Union Building
16. Burnam Hall—Women's Dormitory
17. Sullivan Hall
18. Home Management House
19. Fitzpatrick Arts Building
20. Power Plant
21. Residence of Superintendent of Buildings and Grounds
22. Telford Music Building
23. Veterans' Village
24. Residence
25. Amphitheater

EASTERN KENTUCKY REVIEW

VOL. XXXVII July, 1946 No. 1

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A STANDARD COLLEGE

Approved by

Kentucky Association of Colleges and Secondary Schools

American Association of Teachers Colleges

Southern Association of Colleges and Secondary Schools

American Association of University Women

and

American Council on Education

1946

JANUARY

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1946—COLLEGE CALENDAR—1947

FALL QUARTER

September 19	Thursday	Admission and classification of
September 20	Friday	freshmen*
September 21	Saturday	
September 23	Monday	Registration of upper-class students
September 24	Tuesday	Classes begin
September 25	Wednesday	Last day to register for full load
September 30	Monday	Last day to register for credit
November 28	Thursday	Thanksgiving Holiday
December 13	Friday	Quarter ends

WINTER QUARTER

December 30	Monday	Registration
December 31	Tuesday	Classes begin
January 2	Thursday	Last day to register for full load
January 6	Monday	Last day to register for credit
March 18	Tuesday	Quarter ends

SPRING QUARTER

March 20	Thursday	Registration
March 21	Friday	Classes begin
March 22	Saturday	Last day to register for full load
March 28	Friday	Last day to register for credit
K.E.A.	Thursday noon to Sunday	Spring Recess
June 1	Sunday	Baccalaureate service
June 4	Wednesday	Commencement
June 6	Friday	Quarter ends

SUMMER QUARTER

First Term

June 9	Monday	Registration
July 15	Tuesday	Term closes

Second Term

July 17	Thursday	Registration
August 23	Saturday	Term closes

FALL QUARTER 1947

September 18	Thursday	Admission and classification of fresh-
September 19	Friday	men
September 20	Saturday	
September 22	Monday	Registration of upper-class students

* Freshmen are expected to be present at 8:30 a. m., Thursday, September 19, and remain for the entire period set aside for admission and classification.

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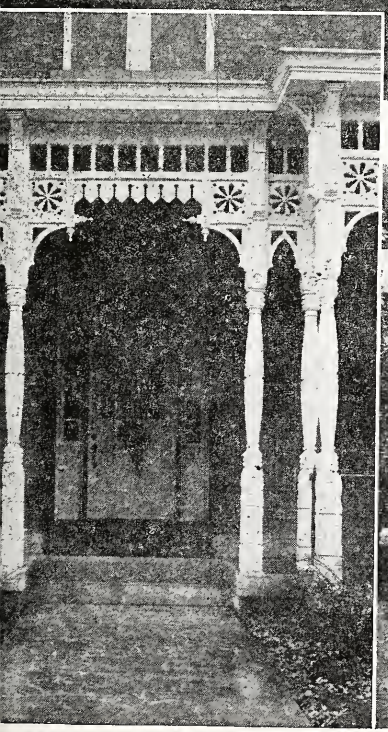

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* Retired June 30, 1942.

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* Retired June 30, 1942.

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Graduate, Virginia Intermont College; A. B., University of Kentucky; A. M., Columbia University.

TOM C. SAMUELS, Ph. C., B. S., M. S. — **Assistant Professor of Health and Physical Education; Assistant Athletic Coach**

Ph. C., B. S., University of Michigan; M. S., University of Kentucky.

ANNA A. SCHNIEB, A. B., A. M., Ph. D. — **Professor of Education**

Diploma, Indiana State Teachers College; student, Indiana University; A. B., A. M., Columbia University; additional graduate

** On leave of absence, military service.

work, Columbia University and University of Chicago; Ph. D., University of Vienna; additional work, University of Chicago.

FRANK E. SCHROETER, B. S. — **Instructor of Industrial Arts**

B. S., Stout Institute.

BLANCHE SAMS SEEVERS, B. Mus., A. B., M. Mus. — **Assistant Professor of Music**

B. Mus., A. B., University of Kansas; M. Mus., Northwestern University.

MARIETTE SIMPSON, A. B., Mus. B., M. S. — **Assistant Professor of Music**

A. B., Oberlin College; Mus. B., Oberlin Conservatory of Music; M. S., Institute of Musical Art of the Juilliard School of Music.

***ETHEL MAY SLADE, B. S.** — **Assistant Professor of Elementary Education; Supervising Teacher, Rural Demonstration School**

B. S., Eastern Kentucky State Teachers College; graduate work, Eastern Kentucky State Teachers College and University of Chicago.

EVELYN SLATER, B. S., M. S. — **Assistant Professor of Home Economics**

B. S., M. S., University of Kentucky; additional graduate work, Columbia University.

ELIZABETH MELANIE SORBET, A. B., M. A. — **Assistant Professor of Commerce**

A. B., Louisiana State Normal College; M. A., George Peabody College for Teachers.

THOMAS STONE, Mus. B. — **Assistant Professor of Music**

Mus. B., Oberlin College; additional work, La Follette School of Music, New York.

VIRGINIA F. STORY, B. S., M. A. — **Assistant Professor of Elementary Education; Supervising Teacher, Elementary Training School**

Diploma, Eastern Kentucky State Teachers College; B. S., M. A., George Peabody College for Teachers.

BROWN E. TELFORD, B. S. — **Assistant Professor of Music; Teacher of Piano and Organ**

Diploma, Greenbrier College for Women; student, Cincinnati Conservatory of Music, New York School of Music and Arts, New England Conservatory of Music; B. S., Columbia University.

***LONA LEE TURNER, A. B., M. A.** — **Assistant Professor of Mathematics**

A. B., Eastern Kentucky State Teachers College; M. A., University of Michigan; additional graduate work, University of Chicago.

*** On leave for study.

MRS. JULIAN TYNG, B. S., M. A. — **Associate Professor of Education**

Diploma, Eastern Kentucky State Normal School and Teachers College; B. S., George Peabody College for Teachers; graduate work, George Peabody College for Teachers; M. A., Teachers College, Columbia University.

JAMES E. VAN PEURSEM, A. B., B. Mus., M. A. — **Professor of Music**

A. B., Morningside College; B. Mus., Oberlin College; M. A., New York University.

SAMUEL WALKER, A. B., A. M., Ph. D. — **Assistant Professor of History; Supervising Teacher, Model High School**

A. B., Maryville College; A. M., Ph. D., University of Kentucky.

RALPH W. WHALIN, B. S., M. Ed. — **Associate Professor of Industrial Arts**

B. S., Western Kentucky State Teachers College; M. Ed., University of Missouri.

ARTHUR L. WICKERSHAM, B. S., M. A. — **Instructor of Mathematics; Supervising Teacher, Model High School**

B. S., M. A., Eastern Kentucky State Teachers College.

ELIZABETH WILSON, B. S., M. A. — **Assistant Professor of Elementary Education; Supervising Teacher, Elementary Training School**

Diploma, Martin College; B. S., M. A., George Peabody College for Teachers.

LELAND WILSON, B. S., M. S. — **Instructor of Science; Supervising Teacher, Model High School**

B. S., Eastern Kentucky State Teachers College; M. S., University of Kentucky.

GERMANIA J. WINGO, B. S., M. A. — **Assistant Professor of Elementary Education; Supervising Teacher, Elementary Training School**

Diploma, Virginia State Normal School; diploma in critic work, Columbia University; B. S., M. A., Teachers College, Columbia University; additional graduate work, University of Colorado.

LIBRARY STAFF

MARY FLOYD, A. B., M. A., B. S. in Library Service — **Librarian**

A. B., Eastern Kentucky State Teachers College; M. A., Teachers College, Columbia University; graduate student, University of Chicago; B. S. in Library Service, Columbia University.

MRS. NANCY MILLER, B. S., M. A. — **Assistant Librarian**

B. S., M. A., George Peabody College for Teachers.

LOUISE RUTLEDGE, A. B., B. S. in Library Science — **Assistant Librarian**

A. B., Eastern Kentucky State Teachers College; B. S. in Library Science, George Peabody College for Teachers; additional graduate work, University of Wisconsin.

MRS. GUY WHITEHEAD, B. S., B. S. in Library Science — **Assistant Librarian in Charge of Reference Work**

B. S., B. S. in Library Science, George Peabody College for Teachers.

R. O. T. C. STAFF

LT. COLONEL JOHN O. TAYLOR, B. S. in E. E. — **Professor of Military Science and Tactics**

B. S. in E. E., Alabama Polytechnic Institute; graduate of the Field Artillery school and Battalion Commander in the 10th Armored Division.

MAJOR FRANK E. WILLARD, B. S. — **Assistant Professor of Military Science**

B. S., Tennessee State Teachers College; graduate of Field Artillery school.

CAPTAIN ROGER E. HIGGINS, C. E. — **Assistant Professor of Military Science**

C. E., Cornell University; graduate of Field Artillery school.

SERGEANT THURMAN BOND — **Assistant Military Property Custodian**

ADMINISTRATIVE STAFF

MRS. KATHRYN McNUTT ALLEN, Assistant to the Business Agent

W. A. AULT, Superintendent of Buildings and Grounds

FRED BALLOU, Book Store Manager

MRS. ETHEL BLANTON, Housekeeper

LOUISE BROADDUS, A. B., Recorder, Registrar's Office

G. M. BROCK, Business Agent

MRS. KATHERINE CHENAULT, A. B., Hostess, Student Union Building

LOIS COLLEY, Assistant to the Alumni Secretary

NANCY DURHAM, A. B., Stenographer, President's Office

MRS. KATHERINE EASTIN, Social Director, Sullivan Hall

BEATRICE GOINS, B. S., Secretary to the Director of Extension

MRS. BESSIE H. GRIGGS, Information Clerk

MRS. J. W. HILL, Assistant Director of the Cafeteria

MRS. MAUDE McLAUGHLIN HILL, A. B., Cashier and Accounts Clerk

MRS. C. A. KEITH, Housemother, Men's Dormitories

E. P. McCONNELL, Bookkeeper

EDITH L. McILVAINE, Supervisor of the Cafeteria

WILMA MANNING, R. N., College Nurse

L. KATHERINE MORGAN, Secretary to the President and Secretary to Board of Regents

MRS. HELEN W. PERRY, Assistant to the Director of Personnel

CARRIE POTTS, Secretary to the Registrar

MAYE M. WALTZ, Secretary to the Dean

EUNICE WINGO, Assistant to the Dean of Women

FACULTY ORGANIZATION

CHAIRMEN OF DIVISIONS OF INSTRUCTION

Applied Arts and Sciences ..... W. J. Moore, Chairman
- Agriculture
- Commerce
- Home Economics
- Industrial Arts
- Library Science

Fine Arts ..... Frederic P. Giles, Chairman
- Art
- Music

Biological and Physical Sciences ..... Arnim Dean Hummel, Chairman
- Biology
- Chemistry
- General Science
- Geology
- Physics

Education ..... D. Thomas Ferrell, Chairman
- Elementary Education
- Educational Psychology
- Public School Administration
- Secondary Education
- Training Schools

Health and Physical Education ..... Charles T. Hughes, Chairman
- Health
- Physical Education

Languages ..... Roy B. Clark, Chairman
- English
- French
- German
- Latin
- Spanish

Mathematics ..... Smith Park, Chairman

Social Sciences ..... Charles A. Keith, Chairman
- Geography
- Government
- History
- Sociology

COMMITTEES

ADVISORY COUNCIL ON STUDENT PERSONNEL

Moore, Ballou, Brock, Case, Chenault, Cuff, Edwards, Floyd, Keith, Mattox

ADVISORY COUNCIL ON PUBLICATIONS

Moore, Adams, Clark, Dorris, Engle, Floyd, Gill

ALUMNI

Adams, Allen, Broaddus, Case, Chenault, Coates, Doty, Durham, Evans, Fitz, Floyd, Goins, Hill, Lingenfelser, McKinney, Moore, Neale, Regenstein, Richards, Rigby, Rutledge, Slade, Story, Turner, Tyng, Wickersham, Wilson

ATHLETIC

Park, Coates, Grise, Hughes, Hummel, LaFuze, Rankin

CREDITS AND CREDENTIALS

Mattox, Carter, Clark, Cuff, Herndon, Park, Schroeter

ENTRANCE EXAMINATIONS

Mattox, Barnhill, Burns, Gill, McKinney, Turner, Walker

EVALUATION

Cuff, Adams, Coates, Cox, Ford, Herndon, Hounchell, Jenkins, Keene, Lee, Turner, and four students

EXTENSION

Carter, Adams, Dorris, Engle, Mattox

FINE ARTS AND ENTERTAINMENT

Giles, Buchanan, Campbell, Kennamer, McPherson, Murbach, Oldham, Rider, Seevers, Simpson, Stone, Telford, Tyng, Van Peursem, and four students

GRADUATE INSTRUCTION

Moore, Barnhill, Clark, Coates, Ferrell, Giles, Hummel, Keith, Kennamer, Mattox, Park, Schnieb

GRADUATION

Kennamer, Case, Hummel, Jenkins, Keith, Mattox

LIBRARY

Floyd, Allen, Dorris, Ferrell, Giles, Herndon, Hood, Jenkins, Keene, LaFuze, Lee, McKinney, Moore, Park, Van Peursem, two juniors, and two seniors

PERMANENT PLANNING

Clark, Burrier, Carter, Cox, Deniston, Edwards, Ferrell, Hughes, Giles, Hummel, Keith, Kennamer, LaFuze, Mattox, Moore, Murbach, Park, Van Peursem, and four students

PUBLIC RELATIONS

Mattox, Allen, Burns, Coates, Deniston, Ford, Keene, Kennamer, Lee, Seevers, Slater, Whalin, and four students

RURAL EDUCATION

Ferrell, Case, Dorris, Edwards, Engle, Evans, Hansen, Lingenfelser, Regenstein, Slade, Story, Tyng, Wilson, Wingo, and four students

RULES

Park, Carter, Case, Edwards, Fowler, Keith, Mattox

SOCIAL

Case, Burrier, Burns, Cox, Cuff, Fowler, Herndon, Hummel, Keith, Lee, Sorbet, Tyng, and eight students

STANDARDS

Moore, Case, Cuff, Keith, Mattox

STUDENT GUIDANCE AND PERSONNEL

Cuff, Engle, Ford, Giles, Grise, Herndon, Kennamer, LaFuze, McPherson

STUDENT LOANS, SCHOLARSHIPS, AND FELLOWSHIPS

Cuff, Brock, Case, Cox, Keith, Rankin, Schnieb

STUDENT UNION

Chenault, Ballou, Case, McIlvaine, O'Donnell, and five students

STUDENT WELFARE

O'Donnell, Ford, Hood, Moore, Park, Whalin, Whitehead

VETERANS

Mattox, Cox, Ferrell, Grise, Keene

VISUAL EDUCATION

Gumbert, Dorris, Fitz, Floyd, LaFuze, Mattox, Pugh, Rumbold, Samuels, Tyng

The President and Dean are ex officio members of all standing committees.

GENERAL INFORMATION

GENERAL INFORMATION

ORGANIZATION

The Eastern Kentucky State Teachers College is organized on the quarter plan. The school year is divided into four quarters: Fall, Winter, Spring, and Summer. The fourth quarter of the school year is devoted to the Summer Session. The Summer Quarter is an integral part of the school year and is divided into two terms. A student who attends all four quarters can complete a full four-year college course in three calendar years.

The College curricula are organized on various levels and lead to the Bachelor of Arts or the Bachelor of Science degree, and to the Master of Arts degree. Freshmen and sophomore courses are offered in the Lower Division. Junior and senior courses are given in the Upper Division. Observation and Student Teaching are provided in the Elementary and Secondary Training Schools. The Graduate Division offers work for those who want to major in Education and minor in other departments.

LOCATION

Eastern Kentucky State Teachers College is in Richmond, Madison County, Kentucky, on the main line of the L. & N. Railway, 112 miles south of Cincinnati, Ohio; on the Dixie Highway (U. S. No. 25), 26 miles southeast of Lexington; on U. S. Highway No. 227; and on Kentucky Highway No. 52.

Located in the famous Bluegrass Region of Kentucky, the College is surrounded by places of historic and scenic interest. These places of interest include: Boonesboro (12 miles), Harrodsburg and Shakertown (45 miles), Herrington Lake (35 miles), Cumberland Falls (100 miles), State Capitol at Frankfort (55 miles), Berea College (14 miles), Kentucky Natural Bridge State Park (63 miles), My Old Kentucky Home (85 miles), Louisville (100 miles), Lincoln Memorial (110 miles), the foothills of the Cumberland Mountains (20 miles), and the famous stock farms in the heart of the Bluegrass Region (26 miles).

HISTORY

The year the State of Massachusetts established normal schools for the preparation of teachers, Kentucky established a public school system. The first Superintendent of Public Instruction of Kentucky in his initial report requested the General Assembly for "the founding of one or more normal schools for the purpose of training the sons of the soil for teaching." Fifteen different state superintendents appeared before more than thirty sessions of the Legislature making the same plea for a school for

teachers. Sixty-eight years passed before the General Assembly of 1906 heeded this request. The late J. C. W. Beckham, Governor of the State at that time, signed the bill establishing the Eastern Kentucky State Normal School on March 21, 1906, and shortly after this a commission selected the campus of old Central University at Richmond as the site of the new school.

The curriculum has been improved from the short review and certificate courses of the first years to a four-year curriculum leading to the Bachelor of Arts or the Bachelor of Science degree, and a one-year graduate curriculum leading to the Master of Arts degree in Education. Requirements for college entrance have been raised from eighth grade graduation or possession of any kind of certificate to graduation from an accredited high school.

The College has been directed by five presidents: Ruric Nevel Roark, 1906-1909; John Grant Crabbe, 1910-1916; Thomas Jackson Coates, 1916-1928; Herman Lee Donovan, 1928-1941; W. F. O'Donnell, 1941—.

AIMS OF THE COLLEGE

A. The primary aim of Eastern Kentucky State Teachers College is to prepare teachers for the schools of Kentucky. In accomplishing this aim the College should develop in the prospective teacher:

1. As a general basis for all good teaching, an understanding of what is going on in the world and what has gone on in the past and the ability to adapt such understanding to situations that may arise for him as a member of society.
2. A number of more or less specialized understandings such as:
   a. An understanding of the function of education in a democratic society. It may be assumed that the success of a democratic society is dependent upon a wide dissemination of such education as will enable its citizens to meet situations and solve problems that may arise in a changing society.
   b. An understanding of the relation of the individual to society in a democratic society. It may be assumed that the integrity of character of the individual and the inseparability of freedom and responsibility, of rights and duties, constitute the very foundation of democracy.
   c. An understanding of child behavior at the different age periods.
   d. An understanding of the social forces at work upon the child.

e. An understanding of child health, both physical and mental, in the learning process.

f. An understanding of the influence of the physical and mental health of the teacher upon the child.

g. An understanding of the importance of the teacher's patterns of conduct.

h. An understanding of the function of the arts in the education of the teacher. It should be recognized that the arts have power to release emotional tensions, and thereby promote health, and to develop esthetic insights and a sensitiveness to beauty and ugliness.

i. An understanding of the function of the sciences in the education of the teacher. Such understanding should be of great service in helping him make use of the resources of the community and developing open-mindedness and an inclination to distinguish between belief and proof.

j. An understanding of the importance of the social development of the teacher. This would include such attitudes and abilities as willingness and ability to cooperate with one's colleagues, a desire for wholesome recreation, and the willingness and ability to make the use of good English habitual.

k. An understanding of the importance of the sensitivity and adaptability of the teacher to the possibilities of the community.

l. An understanding of the various learning processes and the corresponding teaching techniques.

m. An adequate understanding of the particular area of experience or field of subject matter which the student has selected to teach.

n. An understanding of what constitutes good teaching.

B. Another aim is to furnish guidance and to provide instruction in vocations other than teaching:

1. The selection of the best students for prospective teachers:

a. By encouraging such high school graduates to come to Eastern as have been recommended by superintendents and principals.

b. By selecting from the students enrolled only such as possess or may develop good qualities for teachers.

2. The furnishing of counsel and guidance for vocations to the students who do not expect to teach or are not suited to teaching.

3. The providing of instruction for those students who are not preparing to become teachers.
   a. Basic education approximately the same as for teachers.
   b. Preprofessional education for medicine, law, engineering, etc.
   c. Vocational studies such as may be pursued in the fields of agriculture, commerce, and the practical arts.
4. The providing of vocational and general education for adults.

C. A third aim of Eastern is to make a real contribution to the life of the community or area which the college serves:

1. By preparing only worthy teachers.
2. By conducting extension courses (either on the campus or off), or study centers when requested.
3. By furnishing expert advice or other assistance at teachers' conferences.
4. By supplying speakers for high school commencements and other community activities.
5. By keeping a personal interest in the graduates and encouraging professional and intellectual growth.
6. By keeping in close touch with the needs of the teachers in the field and by being ready to give assistance to the teachers.
7. By holding on the college campus conferences for the further development of leaders.
8. By supplying to the teachers of the community which the college serves library materials and other materials such as visual aids.

BUILDINGS AND FACILITIES

THE CAMPUS

The beauty of Eastern's campus lies in the gently rolling bluegrass slopes and in the stately forest trees and shrubs. The campus is further enhanced by a replica of an ancient Greek Amphitheater which has a seating capacity of 2,500.

The College plant, valued at approximately $3,250,000.00, includes eighteen beautiful and well-equipped buildings located on more than 225 acres of bluegrass land.

COATES ADMINISTRATION BUILDING

The Thomas Jackson Coates Administration Building was named in honor of Eastern's third president. The offices of the President, Dean, Registrar, Personnel Director, Business Agent, Director of Extension, and of some instructors are located in this building. There are also classrooms in the Administration Building.

HIRAM BROCK AUDITORIUM

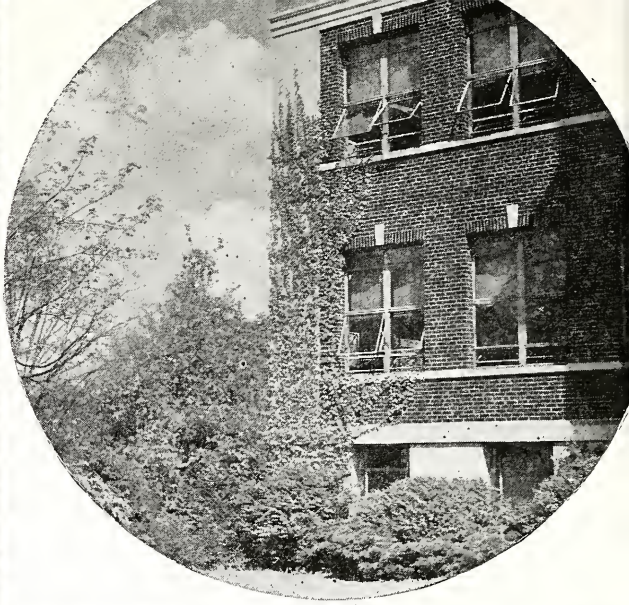
The Hiram Brock Auditorium was named in honor of Senator Hiram Brock who served as a member of the Board of Regents. It adjoins the Administration Building and has a seating capacity of 2,000. The Auditorium has a stage 40 feet by 30 feet, equipped with adequate curtains and drops, a modern movie projection room, and a Hammond electric organ. It also contains studios and dressing rooms.

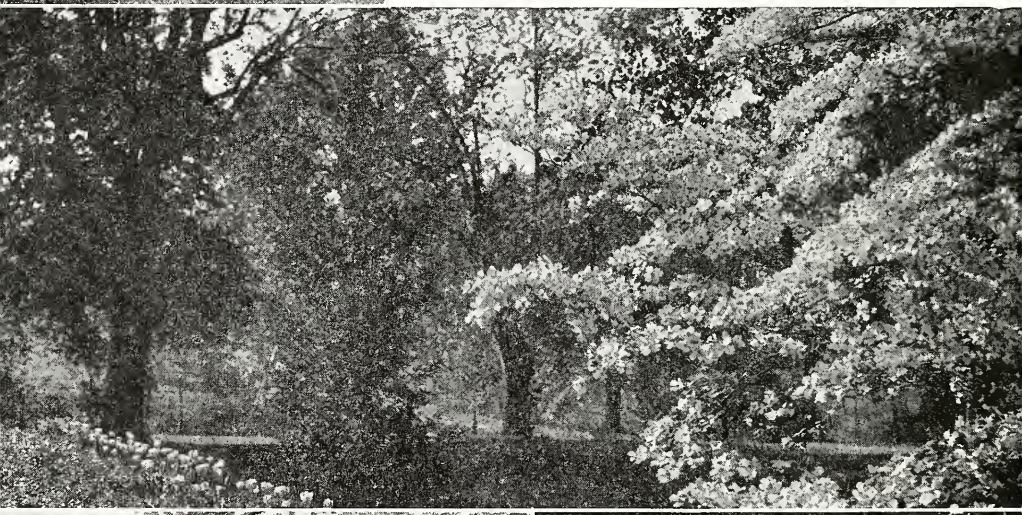
PRESIDENT'S HOME

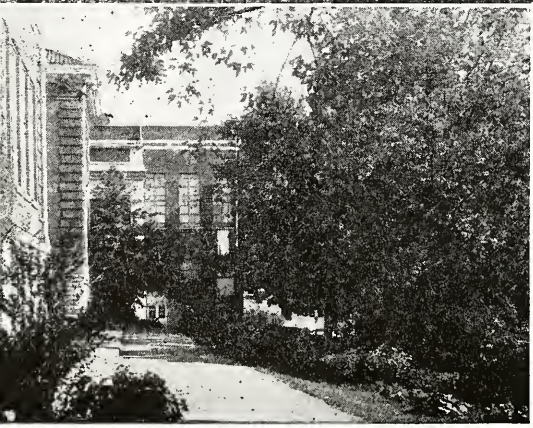
The two-story brick residence, which is the President's Home, was constructed in 1889 as a residence for the Chancellor of Central University but did not become the property of the College until 1912.

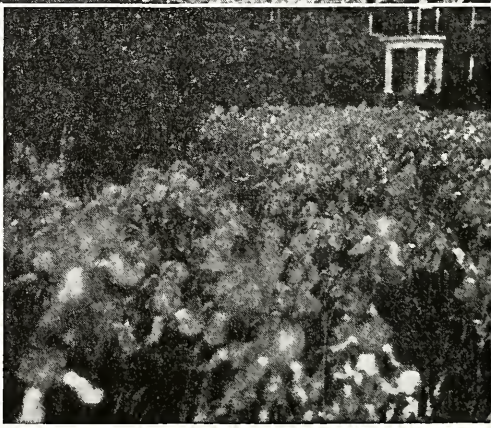
ROARK BUILDING

Roark Building has recently been completely repaired and redecorated. It provides excellent facilities for the departments of mathematics, chemistry, biology, physics, geography, and geology. It was named in honor of Dr. Ruric Nevel Roark, Eastern's first president.









SPRING

CAMMACK BUILDING

The James W. Cammack Building was named for a man who was appointed to the first Board of Regents for the College in 1906 and who remained on the Board as an efficient and faithful servant until his death in 1939. The building is designed and used entirely for the elementary grades of the College Training School.

RURAL DEMONSTRATION SCHOOL

The Rural Demonstration School, located on the College Farm near the campus, is a model brick building. It serves as a laboratory in which students who plan to teach in the one-room rural schools of the State may get practical experience.

UNIVERSITY BUILDING

The University Building, a handsome, four-story brick structure, was constructed in 1874 and, as a result of excellent maintenance, still serves as well as when it was built more than seventy years ago. It stands as a landmark on the campus and houses the high school division of the Eastern Teachers College Training School.

CRABBE LIBRARY

The John Grant Crabbe Library houses over 80,000 volumes and several hundred periodicals. The John Wilson Townsend Collection of Kentuckiana, consisting of more than 4,000 volumes, is one of the most extensive of its kind in existence. The Library was named in honor of Eastern's second president, John Grant Crabbe, who served the institution from 1909 to 1916.

WEAVER HEALTH BUILDING

The Weaver Health Building is named for the late Charles F. Weaver of Ashland, Kentucky, who served on the Board of Regents at Eastern from 1920 to 1932. It is one of the largest and best equipped buildings on the campus. In it there are two gymnasiums, one 110 feet by 90 feet and one 74 feet by 40 feet; a large variety of physical education apparatus; an official-size tile swimming pool equipped with machinery for heating, filtering, and purifying all water that enters the pool; more than 1,200 steel lockers for the use of the students; offices of members of the health and physical education staff; several classrooms; ROTC headquarters; and the bacteriology laboratory.

FITZPATRICK ARTS BUILDING

The Fitzpatrick Arts Building houses three departments of the College; Industrial Arts, Home Economics, and Art. Modern machinery and the latest teaching equipment are available to

students taking work in these departments. It is named for the Honorable H. D. Fitzpatrick who was a member of the Board of Regents of the College.

HOME ECONOMICS PRACTICE HOUSE

The Practice House is the residence for those students in the Home Economics Department who take the laboratory course in Household Management. Here the girls live and work together for about twelve weeks, co-operatively preparing their own meals, doing their own marketing, entertaining their guests, and making a pleasant home life for themselves.

TELFORD MUSIC BUILDING

The Telford Music Building, located on the campus, was formerly the manse of the First Presbyterian Church. In it are the studios of the teachers of music, except the director, and several practice rooms. It is named for Dr. R. L. Telford, who was minister of the First Presbyterian Church for many years.

JOHNSON STUDENT UNION BUILDING

Eastern's newest and finest building is the Keen Johnson Student Union Building. This building contains club rooms for students, recreation halls, the Little Theater, student post office, bookstore, soda fountain and grill, dining halls, the faculty club rooms, and a spacious reception room. It was named in honor of a former Governor of Kentucky who also served on the Board of Regents. The Student Union Building was constructed by means of a Federal grant and a bond issue at no direct cost to the State.

HANGER STADIUM

The Hanger Stadium was built as a gift from students, faculty, and friends of the College, supplemented by a PWA grant. This concrete, steel, and tile structure has dormitory accommodations for thirty men students, offices for coaches, dressing and equipment rooms, and showers. The seating capacity is 5,000.

STATELAND FARM

New Stateland Farm, owned and operated by the College, consists of approximately 185 acres and the total College-owned acreage is approximately 225 acres. The Farm is used as a laboratory by the Department of Agriculture. Vegetables, fruits and dairy products from the Farm are used in the College Cafeteria. The Farm is the home of one of the finest purebred Holstein

dairy herds in the country. New Stateland Hall is located on the Farm and is used as a residence by the manager and as a men's dormitory.

POWER PLANT

The Power plant serves as a central heating unit for all the buildings on the campus.

BECKHAM HALL, McCREARY HALL, MILLER HALL, AND MEMORIAL HALL

The dormitories for men consist of four separate units: Beckham Hall, McCreary Hall, Miller Hall, and Memorial Hall. The first three units provide excellent dormitory accommodations for 48 men each. Memorial Hall provides accommodations for 60 men. The total capacity of the four units is 204 men. The rooms in Beckham, McCreary, and Miller Halls are arranged in suites of four with one adjoining bath. For each pair of such sections, one above the other, there is a private outside entrance. There are no halls except those necessary to connect each group of four rooms with the outside entrance and the bath. Prospective students are invited to inspect the dormitories by appointment with the Dean of Men.

Beckham Hall is named for the late J. C. W. Beckham, who was governor of Kentucky when Eastern was founded. McCreary Hall is named for James B. McCreary, a Richmond citizen, who twice served the State as Chief Executive. Miller Hall is named for Robert W. Miller, a Madison Countian, who introduced in the lower house of the General Assembly a bill establishing Eastern. Memorial Hall derived its name from a building constructed by Central University.

BURNAM HALL

Burnam Hall was named for Judge A. R. Burnam who served in the Senate and helped Eastern secure her first significant appropriation. It provides beautiful, comfortable, and fireproof living quarters for 370 students. Most of the rooms are arranged in suites of two with a connecting bath. A few rooms have private baths. Prospective students are invited to inspect rooms in the dormitories for women by appointment with the Dean of Women. These buildings are open practically every day in the year.

SULLIVAN HALL

Sullivan Hall is a dormitory for women and accommodates approximately 158 students. It was named for the first local regent, Mr. Jere A. Sullivan, who helped establish the first two normal schools in Kentucky. Sullivan Hall is a comfortable and

convenient home for the women who choose to live there. Central baths are located on each floor of the building.

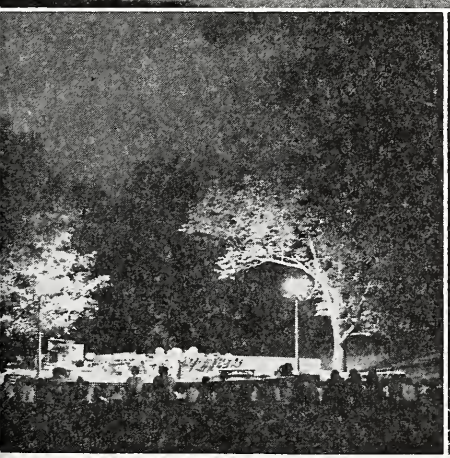
INDIVIDUAL RESIDENCES

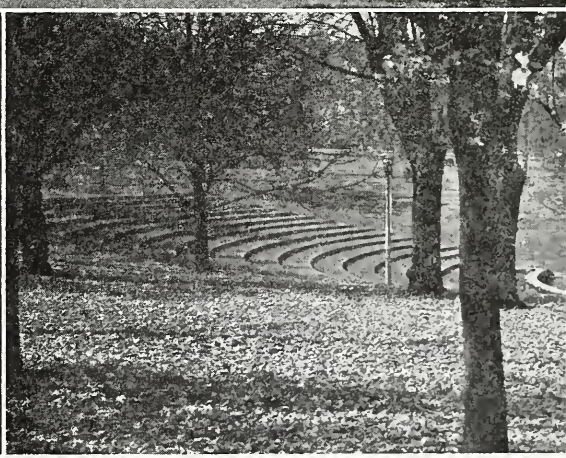
There are two individual residence buildings that are also a part of the campus. One is a two-story brick building that was a part of the Central University plant and is the residence of the Superintendent of Buildings and Grounds. The second residence is a two-story frame building on the Second Street entrance to the campus.

VETERANS' HOMES

The College is making special efforts to meet the needs of Veterans for homes. A hundred pre-fabricated houses or apartments have been located on the campus at Eastern for occupancy by Veterans and their families. Dormitory facilities have been secured for one hundred additional single Veterans. Further information regarding Veterans' homes on the College Campus or in Richmond may be secured by writing the College.

VETERANS' VILLAGE





CAMPUS SCENES

STUDENT SERVICES AND ACTIVITIES

Living Accommodations.—Students who do not live in dormitories are required to live in homes approved by the College. All students not living in their own homes, whether rooming in the dormitories, in private homes, or in rooming houses, are alike subject to the regulations and supervision of the College.

Dormitory Rooms for Women Students.—Women students are required to occupy dormitory rooms while rooms are available on the campus. After the dormitory accommodations for 528 students are filled, women students may take rooms in private homes in Richmond, but should not engage rooms without first consulting the Dean of Women.

Dormitory Rooms for Men Students.—Dormitory rooms will be reserved for men who meet admission requirements as long as facilities are available. The dormitories for men accommodate 234 students.

Rate of Room Rent for Women Students.—The rate of room rent varies according to the location, furnishings, equipment, and the number of students occupying a room.

BURNAM HALL—

Front rooms	$27.00	per	quarter	per	student
Outside rooms—South section	24.00	"	"	"	"
Inside rooms—on court	21.60	"	"	"	"
Front rooms—North section	18.00	"	"	"	"
All other rooms—North section	16.20	"	"	"	"
New addition	24.00	"	"	"	"

SULLIVAN HALL—

Front rooms	$16.20 to $18.00	per	quarter	per	student
All other rooms except fourth floor	16.20	"	"	"	"
Rooms on fourth floor	12.00	"	"	"	"

Rate of Room Rent for Men Students.—Room rent varies according to the facilities provided.

MEMORIAL HALL—

Rent of rooms in this hall ranges from $18.00 to $21.60 per quarter per student.

BECKHAM HALL, McCREARY HALL, AND MILLER HALL—

All rooms in these halls rent for $24.00 per quarter per student.

Dormitory Room Reservations.—Students desiring to have rooms reserved in the dormitories should write for application forms. When applying for dormitory reservations, students should mention the price of room preferred. Applications for room re-

McCreary, Beckham, Miller, and Memorial Halls
(Dormitories for Men)

servations are filed in the order in which they are received. Rooms can generally be assigned promptly upon receipt of applications; however, reservations are subject to cancellation unless a student has complied with Admission and Scholarship requirements.

Room reservations cannot be transferred and are void unless claimed by 4:30 p. m. on the opening day of the quarter.

Room Deposit.—When the room assignment is received by the student, a room deposit fee of $5.00 must be paid within ten days to make the reservation permanent. This fee is retained by the college, as a guarantee of the proper care of room and furnishings. At the termination of the student's stay in the dormitory, the whole or such part of it as may be due after deduction for damage is made, will be refunded to the student.

Room reservation fees should not be sent until dormitory assignments have been received. A room reservation fee will be refunded only when receipt is surrendered not later than ten days before the opening of the quarter.

Off-Campus Rooms for Students.—Students interested in renting off-campus rooms may secure a list by writing to the College.

College Cafeteria.—The Cafeteria is operated by the College for the convenience of the students. Most of the students, including those who live off the campus as well as those who live on the campus, find it to their advantage to take their meals in the cafeteria.

Book Store.—The College Book Store is located on the ground floor of the Student Union Building. It is operated by the College and provides books and classroom supplies to students at reasonable prices. A grill is operated in connection with the Book Store.

College Post Office.—The College Post Office provides mail service for all students who live in the dormitories. An individual lock box is assigned to each person. The Post Office is located on the ground floor of the Student Union Building. Students receiving their mail through the College Post Office should have all mail addressed in the following manner: Mr. John Smith, Box 231, College Post Office, Eastern Kentucky State Teachers College, Richmond, Kentucky.

Students with off-campus rooms do not receive their mail through the College Post Office. Their mail should be sent to the address where they are living.

Student Health Service.—The student health service at Eastern is under the direction of the College Physician and a nurse. The service includes an annual physical examination for each student, medical advice and attention at all times, immunizations against contagious diseases, and limited hospitalization. Classes are conducted in first aid, safety, and personal and community

Burnam Hall
(Women's Dormitory)

Sullivan Hall
(Women's Dormitory)

hygiene. The health program at Eastern emphasizes preventive treatment. No charge is made for any of these services to the student.

Athletics.—Eastern has intercollegiate athletic teams in football, basketball, baseball, track, tennis, and swimming. These teams participate in a schedule of contests with other college teams each year. Eastern is a member of the Kentucky Intercollegiate Athletic Conference and the Southern Intercollegiate Athletic Association. All official intercollegiate athletic events in which the college participates are governed by the rules and regulations of these two organizations.

Play and Recreation.—Eastern affords its students opportunities for play and recreation. Recreational activities are required of all freshmen and sophomores. These activities, offered during school hours, are varied and seasonal. The aims are to develop regular habits of play, physical strength, vigor and sportsmanship. Sports, such as playground baseball, volley ball, soccer, speedball, hockey, lacrosse, track, field archery, handball, lower organized games and their modifications, are offered.

Every student has an opportunity to participate in the leisure-time activities which are offered in seasonal tournaments.

The Swimming Pool.—The swimming pool in the Weaver Health Building serves both the college and the training schools. Only bona fide students and those officially connected with the institution are permitted to use the pool. A complete physical examination and a health certificate are required for admission. Students who expect to use the pool should see the college physician and arrange to take a physical examination. Regulation cotton bathing suits are required. Admission to the pool is strictly according to schedule.

Student Guidance and Personnel Services.—The personnel program at Eastern is planned to help students meet their individualized needs and to achieve success. Also to help students avoid experiences which are likely to be too costly, the best available tools, techniques, and resources are used.

The personnel services of the college are related to: (1) Admission of new students; (2) orientation of freshmen; (3) evaluation and counseling of students; (4) mental and physical health; (5) provision for well-rounded student activities; (6) supervision of adequate living facilities; (7) maintenance of useful personnel records; (8) provision for employment, placement, and follow-up requirements.

Many staff members handle various aspects of the personnel work. The Dean of the College, the Registrar, the Dean of Women, the Dean of Men, the Director of Personnel, and in fact, all mem-

bers of the faculty counsel students. The College Physician handles health problems; the Dean of Women and the Dean of Men provide counsel relative to social life, living facilities, and related problems of students; and other consultants render specialized guidance as needed by students and as implied by a modern philosophy of education.

Personnel services are provided at Eastern for all new students; additional, optional services are available to help individuals with their planning; and clinical services are arranged to meet special needs. All personnel activities, however, are designed to be practical. They are provided to help students attain a maximum personal, social, and academic development in a stimulating environment.

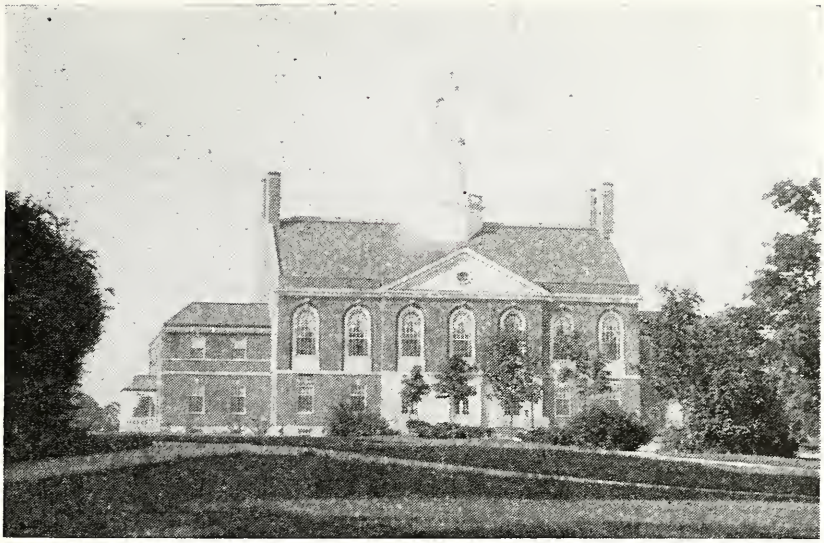
Opportunity for Student Employment.—A limited number of students may earn a part of their expenses by working for the College Cafeteria, Library, Book Store, Post Office, Dormitories, Administrative Offices, College Farm, etc. Some students may also secure part-time employment in Richmond stores, restaurants, and other business establishments.

Students are advised not to enter expecting employment of this kind unless they have arranged for it in advance. All applications for student employment should be addressed to: The Dean, Eastern Kentucky State Teachers College, Richmond, Kentucky. As a general rule students should enter Eastern prepared to pay all their expenses for at least one quarter.

Vocational Rehabilitation.—Students with physical handicaps of various kinds may be approved for Vocational Rehabilitation and receive all registration and tuition fees and school supplies for nine months of a year. Persons who wish to consult with a representative relative to Vocational Rehabilitation should write to the Department of Education, Division of Special Education, Frankfort, Kentucky, for specific instructions.

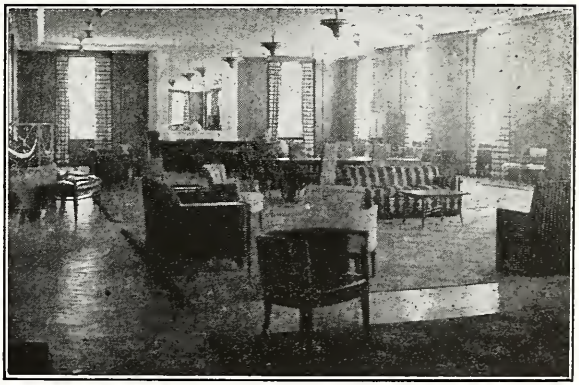
Loans.—The student loan fund of the Eastern Kentucky State Teachers College is designed to help worthy students complete their education. It has been augmented from time to time by gifts from different individuals and organizations and is being increased annually. Small loans are available to upper-class students. Those having high scholarship records will be given preference in the granting of loans. This fund makes it possible for a student to borrow a small amount of money on a personal note at legal rate of interest. Students who desire further information concerning this fund should get in touch with the Chairman of the Student Aid Committee.

William Davis Scholarships.—Under the provisions of the will of the late William Davis of Newport, Kentucky, a sum of money was left for the benefit of students living in the Lona Estella Davis



STUDENT UNION

The center of the social life on the campus is the Student Union building. Its artistically decorated rooms provide a dignified setting for formal occasions as well as for the leisure hours of the day.



Walnut Hall

The dining hall is located in the Student Union.

school district of Rowan County, to be used as scholarships at the Eastern Kentucky State Teachers College. These scholarships of $200.00 each are awarded by the superintendent of Rowan County schools and the president of the Eastern Kentucky State Teachers College. A student desiring to secure one of these scholarships should make application to the superintendent of Rowan County Schools.

Music Scholarships.—The College awards annually three scholarships of $54.00 each to those students who make the most satisfactory progress in piano, voice, and violin.

Science Club Medal.—The Science Club presents annually a medal to that senior majoring in any of the sciences who has achieved the highest standing in science during his college course.

Regents Medal for Oratory.—The Regents of the College present annually a medal for the best oration given by a college student under the direction of the proper authorities.

Kappa Delta Pi Scholarship Award.—Delta Alpha Chapter of Kappa Delta Pi presents annually a medal to the sophomore with the highest scholastic standing.

Student Service Award.—An award presented annually by members of the Young Women's and Young Men's Christian Associations to that member of the graduating class who, during his or her four years at Eastern, has given the greatest measure of service to fellow students.

Fine Arts Series.—It is the purpose of Eastern to surround her students with every cultural advantage. To this end much time and effort are expended to provide programs by the foremost artists. Each student is able to attend these concerts at a very small expense.

Assembly Programs.—The assembly programs constitute an integral part of the work of the Institution. Students are required to attend these programs.

Church Affiliations.—Eastern is a state-supported institution and is, therefore, non-denominational, but religious activities among the students are encouraged. Meeting places and faculty supervision are provided for such religious organizations as the Baptist Student Union, Christian Youth Fellowship, Methodist Youth Fellowship, Y.M.C.A., Y.W.C.A., and Catholic Club. Churches of the leading denominations are located in Richmond.

Student Organizations.—The student organizations, societies, and clubs at Eastern are varied enough in their activities to include the interests of all the students. While the membership in them is voluntary, all students find it to their advantage to identify themselves with at least one of these activities. Students receive

in these extra-curricular activities a type of training which is impossible for them to get in the classroom. The opportunity for social life among the students, along with the professional and intellectual interests, is a valuable feature of the student activities. Student organizations at Eastern include:

Departmental Clubs.—Agriculture, Alpha Rho Tau (Art), Canterbury Club (English Majors), Cercle Francais, Elementary Council (Elementary Education), Future Teachers of America, Home Economics Club, Iota Alpha Gamma (Industrial Arts Club), Mathematics, Physical Education, Science, Sigma Tau Pi (Commerce Majors), Social Science, World Affairs.

Literary and Dramatic Clubs.—Alpha Zeta Kappa (Public Speaking and Debating), Little Theater Club.

Musical Organizations.—College Band, College Dance Orchestra, Eastino Club (Freshman Girls' Glee Club), Madrigal Club (Upper-class Girls' Glee Club), Men's Glee Club, Messiah Chorus, Orchestra.

Professional Clubs.—Caduceus Club (Medicine, Dentistry), Florence Nightingale Club (Nursing), Phalanx Club (ROTC).

Regional Clubs.—Regional clubs are organized by students from various cities, counties, and sections of the State.

Religious Organizations.—Baptist Student Union, Catholic Club, Christian Youth Fellowship, Methodist Youth Fellowship, Young Women's Auxiliary, Young Men's Christian Association, Young Women's Christian Association.

Miscellaneous Organizations.—"E" Club (Letter Students in Athletics), Kyma Club (Pep Club), Photo Club, 4-H Club.

Honorary Fraternities.—Alpha Psi Omega (National Honorary Dramatic Fraternity), Kappa Delta Pi (Honorary Educational Society), Pi Omega Pi (National Commercial Teachers).

Publications.—Eastern sponsors two types of publications; one is edited by the faculty and the other is edited by students.

The Eastern Kentucky Review is the official publication of the College.

The Eastern Progress is published semi-monthly by students and is the newspaper of the College.

The Milestone is the College Annual published each year by the representatives of the Senior Class. This publication contains photographic and statistical records of all organizations and events of the college year.

Commencement.—Commencements are held at the close of the spring quarter and at the end of the summer session. Students who are candidates for degrees are required to participate in the commencement exercises unless excused by the President. A

student who completes the requirements for a degree during the fall quarter or during the winter quarter will receive the degree at the following spring commencement.

Alumni Association.—The purpose of the Alumni Association is to promote fellowship among the ever-increasing number of graduates and to stimulate a mutual interest between the Institution and her former students. All graduates and former students are considered members of the Alumni Association. Those who pay dues of $1.00 per year are active members. Dues should be mailed to the Alumni Secretary, Eastern Kentucky State Teachers College.

Extension Division.—Eastern provides, through the Extension Division, correspondence courses, extension class instruction, lecturers, and various types of public school service.

The correspondence courses are prepared and conducted by regular members of the faculty and are, in so far as possible, identical with resident courses. For further details see the Extension Division Bulletin or write to the Director of Extension.

Regular members of the faculty conduct extension classes in cities and communities where teachers desire to pursue work in class groups in practically the same way as they would in residence. The cost of extension class instruction is reasonable. For further details see the Extension Division Bulletin or write to the Director of Extension.

A maximum of 48 quarters hours of the required 192 hours for a Bachelor's degree may be earned by correspondence and extension. One-half of the work required for the renewal of a certificate may be earned by correspondence and extension. Those who plan to teach and take work in the Extension Division should distribute the work over the year.

Correspondence credit is recorded as having been earned at the time of completion of the final test. The above restrictions are Statewide and apply to all institutions alike.

Bureau of Appointments.—The Placement Bureau is maintained by the College to assist students and ex-students in obtaining positions and to aid superintendents, principals, and other public school officials to secure the best qualified individuals to fill their vacancies. No charge is made for this service.

ADMISSION REQUIREMENTS

Applications for Admission.—All applicants for admission to Eastern must secure an Application for Admission from the Registrar. This form must be properly filled out and returned to the College. Entrance credits also must be on file before the applicant can be approved for admission.

Admission to the Freshman Class.—All applicants for admission to the Freshman Class, except as provided below, must present evidence of graduation from an accredited high school with two majors and one minor. One major must be in English. Three units are required for a major and two units are required for a minor. Official transcripts signed by the superintendent or principal of the high school from which the individual received a diploma should be sent directly to the Registrar.

Candidates for admission who have completed fifteen or more units but who have not graduated from an accredited high school may be admitted on the basis of an examination to validate the work.

Veterans of World War II who are not high school graduates may be admitted on the basis of the General Educational Development Test provided the test has been taken at an approved center and the candidate for admission has an average score of forty-five on all divisions of the test or has not made below a score of thirty-five on any division of the test.

Candidates for admission who cannot meet one of the above conditions may be admitted as special students provided that the minimum age is twenty-one and the minimum score on the classification test shall be equivalent to the average for students entering the Institution.

Advanced Standing.—Applicants who desire to enter with advanced standing should have transcripts sent from the college in which they have previously earned credit. Candidates for transfer must present an average of "C" on work from other colleges. A transfer student who has a standing slightly below an average of "C" may take the classification test and be admitted on probation provided he makes a rank equal to that of the average student.

Veterans of World War II who have received training while in service that is equivalent to college work will be given credit. The Handbook published by the American Council on Education will be accepted as the guide in evaluating work completed while in service.

Students classified as juniors or seniors in this Institution who wish to take work in other colleges to meet requirements for the degree should secure the permission of the Dean or Registrar before enrolling for the work.

Conditional Admission.—Prospective students are given only conditional room assignments and conditional registration prior to receipt of transcripts of credit and approval for admission. Any student who is given conditional registration shall be automatically dropped if it is found that misrepresentations have been made to gain admission.

How Courses are Numbered.—Courses are numbered according to the following plan:

Courses numbered 10 to 29 are primarily for freshmen and sophomores.

Courses numbered 30 to 49 are primarily for juniors and seniors.

Courses numbered 50 to 59 are for graduate students.

Grading System.—Grades are indicated by letters, to each of which is given a certain value in "grade points." The following is the interpretation placed upon the grading system:

Grade	Meaning	Grade Points per Quarter Hour
A	Excellent	3
B	Good	2
C	Average	1
D	Poor	0
F	Failure	0
I	Incomplete	
Z	Conditioned	

The grades, A, B, C, D, and F cannot be changed by the instructor. A grade of "D" gives credit toward a certificate or a degree if with such credits the student's standing is 1 or more. A grade of "I" shall be assigned only upon condition the student has been unable to complete the course on time because of unavoidable conditions. A grade of "I" must be made complete within one month after the student re-enters the Institution. All grades of "I" automatically become "F" if not completed at the end of a year. The grade of "Z" shall represent a degree of attainment inferior to that of a "D" and shall not entitle the student to any credit but shall promote him to a sequent course in the same department specified by the instructor or head of the department. On completion of this sequent course with a grade of "D" or higher, the mark of "Z" shall be changed automatically to a grade of "D."

The standing of a student is defined as the ratio of his total number of "grade points" to his total number of quarter hours' credit. In order for a student to fulfill the requirements for a certificate or a degree he must offer a number of "grade points" at least as great as the number of quarter hours.

Student Load.—The normal load for a quarter for undergraduate students is sixteen quarter hours exclusive of Physical Education 10. The minimum load to be classed as a full-time student is twelve quarter hours. Students who have established superior records in the Institution may be permitted to enroll for more than sixteen quarter hours provided the approval of the Dean of the College is secured at the time of registration. The maxi-

mum load, however, shall not exceed twenty-one quarter hours exclusive of Physical Education 10.

Correspondence work may be taken while in residence only on condition that it is counted as a part of the load. The combined load of correspondence and residence work can not exceed the amount the student may take in residence. This regulation applies regardless of the institution with which the student does correspondence work.

Scholarship.—For a quarter the minimum standard of achievement which enables a student to re-enroll without question in the College is eight quarter hours' credit and ten grade points.

(a) Failure to meet this standard shall automatically exclude the student from subsequent registration except in the case of a beginning freshman. Such freshman may be registered for such load as the Registrar may assign provided the load shall not be less than 9 quarter hours in a quarter. In each such case of re-registration a specific authorization of load shall be entered on record by the Registrar. Students admitted under this provision are automatically placed on probation for the quarter. Failure during the probation period to meet the minimum standards makes the student ineligible for re-enrollment the following quarter except as provided in (c).

(b) The foregoing rule setting forth automatic exclusion because of failure to meet the minimum standard may be waived by a permanent Committee authorized to exercise such waiver. The Committee at its discretion may waive the rule and authorize the re-registration of persons with credit sufficient to classify them above the freshman year in case such persons fail to meet the minimum standard in one quarter.

(c) The Committee at its discretion may permit by waiver the re-registration of a person in the freshman year after that person has been re-admitted once and has had a load assigned by the Registrar as provided in (a) above and has failed the second time to meet the minimum standard.

Withdrawal from Courses.—Necessary changes in courses must be made promptly after registration and should be approved by the Dean or the Director of Personnel. Permission to add a course will not be given after registration ends without special approval from the instructor. Approval to drop courses during the last month of a quarter will not be given unless justified by conditions beyond the student's control.

Withdrawal from the College.—Occasionally home conditions or some other factor makes it necessary for students to withdraw. In such cases the student must see the President and arrange for the withdrawal. Any student who quits school or withdraws

without securing the approval of the President may not register again unless the President sees fit to reinstate him.

Official Schedule Changes.—The College reserves the right to cancel a course when the registration is not sufficient to warrant its continuance, to divide classes if the enrollment is too large for efficient instruction, and to change instructors when necessary. Additional courses will be organized if the demand is sufficient.

EXPENSES

Incidental Fees.—Incidental fees paid each quarter entitle the student to limited health service, to use of the Library, to use of the Student Union Building, to attend certain Fine Ars programs, to a subscription to the "Eastern Progress", and to other services as directed by the Board of Regents.

Each quarter per student	$22.50
Additional out-of-state fee per quarter	12.50
Each quarter for students carrying less than 12 hours per quarter hour	2.00
Each quarter for graduate students per quarter hour	2.00
Diagnostic and remedial service fee for handicapped students per quarter	30.00

Laboratory.—The fees to be paid for laboratory courses are indicated in connection with descriptions of these courses in another part of this catalog. Laboratory fees cover the cost of materials and laboratory service furnished.

Locker, Lock, Towel, and Uniform.—Students who use lockers in the Weaver Health Building are required to pay a rental of $1.50 per quarter for use of locker, combination lock for locker, and towel. This fee includes laundry service for towels, bathing suits and gymnasium uniforms for the entire quarter.

Laundry and Linen Service.—Students who occupy dormitory rooms pay a fee of $1.50 each quarter for laundry and linen service. This fee covers the rental charge for sheets and pillow cases furnished by the College and provides laundry service for them.

Athletic.—Students who enroll for the fall quarter pay an athletic fee of $2.00 for the school year plus the federal tax. Students who enter the Institution at the beginning of the winter quarter pay an athletic fee of $1.00 plus the federal tax.

Late Registration.—Students who register after the opening date of a quarter are required to pay a late registration fee of $2.00.

Change of Schedule.—A fee of $1.00 will be charged for each voluntary change which a student makes in his schedule after it has been prepared and approved at the time of registration.

Graduation.—The graduation fee is $7.50. The fee covers the cost of diploma, cap and gown rental, and other expenses incidental to graduation.

Special Examinations and Services.—When it is necessary to give a special examination to a student after the scheduled time for same a fee of 50¢ will be charged. This fee covers such services as physical examinations, classification tests, pictures, etc. A special examination as used here is not interpreted to mean examinations for entrance, course examinations, and examinations for advanced standing.

Transcript of Credits.—Each student will be given one transcript of his work without charge. There will be a fee of $1.00 for each additional transcript after the first one has been furnished.

Rate of Room Rent.—The rate of room rent varies from $12.00 to $27.00 per quarter. Specific prices are listed under Living Accommodations.

Estimated Expenses.—The necessary college expenses for one quarter averages about $130.00. This estimated amount is based on the following itemized statement:

Incidental fee $22.50*

Board, if all meals are taken in the college cafeteria..... 60.00
Board may be more or less than this amount, depending on the needs of the individual student.

Room rent 21.00
Room rent varies from $12.00 to $27.00 per quarter for women and from $18.00 to $24.00 per quarter for men.

Books and supplies approximately 15.00

Other expenses 11.50

The above estimate does not include laundry, clothes, and personal spending money.

Students who take private music lessons and/or laboratory courses must add the respective fees to the above estimates in calculating the total expenses for a quarter. Music and laboratory fees are listed in connection with course descriptions.

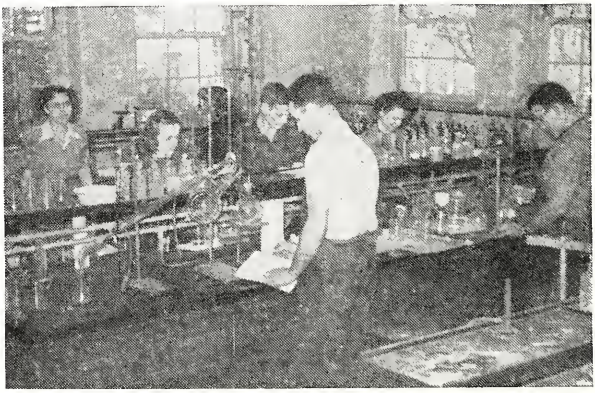
All fees, including the incidental fee, are payable in advance. Board and room rent may be payable in two equal installments, one at the beginning of the quarter and the other at the middle of the quarter.

* Each quarter for out-of-State students, $35.00.

Commerce

Biology Laboratory

Chemistry Laboratory



CURRICULA, DEGREES, AND CERTIFICATES

Teacher-Education Curricula.—The Curricula offered by the College have been planned and developed to meet the needs of students who desire to become teachers, supervisors, and administrators in the public schools. Curricula are offered for the preparation of elementary teachers; for teachers of the special subjects of agriculture, art, commerce, health and physical education, industrial arts, music, and vocational home economics; and for the preparation of high school teachers in fields of biology, chemistry, English, French, geography and geology, history, Latin, mathematics, and physics. These curricula lead to the baccalaureate degrees and the Master of Arts degree with right of certification.

The Bachelor of Arts Degree is conferred upon students who major in art, English, French, geography and geology, history, Latin, Music, and social science.

The Bachelor of Science Degree is conferred upon students who major in agriculture, biology, chemistry, commerce, elementary education, health and physical education, home economics, industrial arts, mathematics, and physics.

The Master of Arts Degree is conferred upon students who complete the graduate program designed to meet the needs of teachers, supervisors, and educational administrators.

General and Pre-Professional Curricula.—A four-year curriculum in general education is offered. Completion of this curriculum entitles the student to receive the baccalaureate degree without right of teaching certificate.

The Institution also offers the courses needed by students who are preparing to enter medical schools, colleges of law, colleges of engineering, and so on.

A special curriculum in the field of commerce is offered. This curriculum provides adequate training in commerce (accounting, general business, and secretarial work) to meet the needs of students who desire to enter the field of business.

Students who take their general and pre-professional work at Eastern are able to satisfy the entrance requirements of the leading schools of medicine, colleges of law, colleges of engineering, and other professional institutions.

Degrees with Teaching Certificate.—The Eastern Kentucky State Teachers College confers three degrees which meet teaching certificate requirements; namely, the Bachelor of Arts degree, the Bachelor of Science degree, and the Master of Arts degree in Education.

Degrees without Teaching Certificates.—Two baccalaureate degrees, the Bachelor of Arts and the Bachelor of Science, are conferred by the College upon students who do not take courses in Education.

General Requirements for the Baccalaureate Degrees.—The degree of Bachelor of Arts or Bachelor of Science is conferred upon those students who have completed an approved four-year curriculum. The minimum amount of credit required for the bachelor's degree is one hundred and ninety-two quarter hours of college credit exclusive of Physical Education 10. Not more than forty-eight quarter hours of the work required for a degree may be earned by extension and/or correspondence. A candidate for a degree must have been in residence a minimum of thirty-six weeks (at least eighteen of which must have been in the senior year) and must have earned a minimum of forty-eight quarter hours while in residence.

The curriculum which the student expects to follow for the completion of the requirements for the bachelor's degree must be filed in the office of the Dean of the College not later than the end of the freshman year. In the case of transfer students the curriculum must be filed before the end of the first quarter or term of resident work. The curriculum must be approved by the Dean of the College and by the major professor.

The Training Schools.—The campus laboratory schools enroll about 350 pupils and have fourteen supervising teachers. The organization includes the Elementary Training School of six grades located in Cammack Building, the Model High School of six grades located in University Building, and the one-room Rural Demonstration School of eight grades situated near by on the College farm.

Pupils who attend the campus training schools come from the city and county in the surrounding community. The number of pupils for each grade is limited to thirty. Listed below are the annual registration fees in the elementary school and the high school:

Grades 1 to 6 inclusive	$ 8.00
Grades 7 to 12 inclusive	12.00

Educational philosophy and procedures are learned by teachers in training through directed observation and supervised practice. The aim is to exemplify in the laboratory schools progressive trends in educational practice, trends which may be accepted as practicable by the more alert schools of the State.

College students in professional courses and in professionalized or special methods courses come into the training schools by appointment to observe. A limited number of students preparing to meet the requirements for a Provisional Elementary

Certificate spend a half day in the school observing and participating for the quarter. The school is used to a limited extent for experimental work in which college students generally participate.

Supervised student teaching is done in the training schools or in affiliated public schools. Students wanting to do student teaching are expected to file applications several weeks before the quarter opens. They must have had as much as one quarter of resident work at Eastern, and all college credits should be on file in the Registrar's Office. They must also meet certain standards in general scholarship, special academic preparation, use of English, health, personality, and professional attitude.

Specific Requirements for Baccalaureate Degrees without Right of Certification.—This curriculum is planned to meet the needs of those wishing to secure a general education without preparing to teach. The work may be planned to meet the requirements for admission to schools of medicine, dentistry, law, and other professions. Recommended curricula may be secured from the Dean's office or from respective heads of departments by those interested in meeting given requirements. The minimum requirements are:

English 10a, 10b, 10c, 21a, 21c, 12 or 23 or 30a and 2 hours	21 hrs.
History 10, 11	8 hrs.
Library Science 10	1 hr.
Physical Education 10 (six quarters)	3 hrs.
Science (General science, biology, chemistry, or physics)	12 hrs.
Sociology 10 (women)	1 hr.
Two majors of thirty-six hours each, or an area of seventy-two hours	72 hrs.
Two minors of sixteen hours each	32 hrs.
Electives	46 hrs.

Specific Requirements for Certificates and Degrees.—The codified regulations relative to teacher education and certification, approved by the Council on Public Higher Education and the State Board of Education and published by the State Department of Education, indicate minimum requirements for various types of certificates.

The Provisional Elementary Certificate valid for three years shall be issued to a person who meets the general requirements of law and files a transcript of standard college credits showing the completion of the following curriculum:

A. General and Special Preparation:

English, including	
Oral and Written Composition	8 hrs.
American or English Literature	4 hrs.
Children's Literature	4 hrs.
Science, selected from	
Biology, Chemistry, General Science, Geology, Physics	8 hrs.

Social Science, including
American History and Government
or History of Civilization ..... 8 hrs.
Geography—Principles ..... 4 hrs.
Teachers' Arithmetic ..... 4 hrs.
Fine Arts
Public School Art ..... 3 hrs.
Public School Music ..... 3 hrs.
Health, Physical Education and Safety ..... 6 hrs.

B. Professional Preparation:

General or Educational Psychology ..... 4 hrs.
Fundamentals of Elementary Education ..... 6 hrs.
Supervised Student Teaching ..... 4 hrs.
Teaching of Reading ..... 4 hrs.
General Electives in Education ..... 4 hrs.

C. General Electives .....22 hrs.

The suggested program for meeting the above requirements is given at the beginning of the Education courses.

The Standard Elementary Certificate valid for four years shall be issued to a person who completes a baccalaureate degree and meets the requirements for teaching in the elementary schools. This certificate may be re-issued or renewed every four years after three years of teaching experience during the life of the certificate or upon the presentation of one-half year of standard college or university work of graduate grade. The Standard Elementary Certificate may be extended for life upon the presentation of evidence that the holder has had three years of teaching experience in the elementary field during the life of the certificate and has completed the requirements for the Master's degree in a standard college or university. Upon application to the Department of Education, a person shall be issued the Standard Elementary Certificate if he files a transcript of credits showing the completion of the following curriculum for elementary teachers:

A. General and Specific Preparation:

English, including
Oral and Written Composition ..... 8 hrs.
American or English Literature ..... 4 hrs.
Children's Literature ..... 4 hrs.
Elective in English ..... 4 hrs.
Science, selected from
Biology, Chemistry, General Science, Geology, Physics.. 16 hrs.
Social Science, including
American History and Government or
History of Civilization ..... 8 hrs.
Principles of Sociology or Rural Economy ..... 4 hrs.
Geography—Principles ..... 4 hrs.
Elective in Geography ..... 4 hrs.
Elective in Social Science from History, Government
Economics or Sociology ..... 8 hrs.
Teachers' Arithmetic ..... 4 hrs.

Fine Arts
- Public School Art ..... 3 hrs.
- Elective in Art ..... 3 hrs.
- Public School Music ..... 3 hrs.
- Elective in Music ..... 3 hrs.

Health, Physical Education and Safety ..... 6 hrs.

B. Professional Preparation:

General or Educational Psychology ..... 4 hrs.
Fundamentals of Elementary Education ..... 6 hrs.
Supervised Student Teaching ..... 8 hrs.
Educational Measurements ..... 3 hrs.
Child Psychology ..... 4 hrs.
Teaching Reading ..... 4 hrs.
Elective in Elementary Education ..... 4 hrs.
General Electives in Education ..... 8 hrs.

C. General Electives ..... 65 hrs.

A recommended curriculum including required courses will be found outlined in the Education Division.

The Provisional High School Certificate valid for four years shall be issued to a person who completes a baccalaureate degree for the training of high school teachers. This certificate may be re-issued or renewed every four years after three years of teaching experience during the life of the certificate or upon the presentation of one-half year of standard college or university work of graduate grade earned during the life of the certificate. Upon application to the Department of Education, a person shall be issued the Provisional High School Certificate if he files a transcript of credits showing the completion of a minimum curriculum which includes the following courses and standards:

A. Minimum General or Core Requirements:

Each candidate must present 16 quarter hours of English. In addition to this a total of 40 quarter hours must be selected from the following fields:

Fine Arts	Health, Physical	Science
Foreign Language	Education and Safety	Social Science
Mathematics	Vocational Fields	Philosophy and Psychology

No candidate may present fewer than three or more than four fields, and in no field may he offer fewer than 8 quarter hours; and in no instance may the selection of the general education courses include the fields which he chooses as his majors or minors, except that he may major or minor in English. This regulation applies to those who begin their college preparation for teaching after September 1, 1942.

B. Teaching Fields:

Two majors—36 quarter hours each, or
One major and two minors (36, 24, 24) or
An Area of concentration—72 quarter hours
Teaching fields must be selected from those in the public school curriculum prescribed by the State Board of Education.

C. Professional Preparation:

Psychology or Educational Psychology	4 hrs.
Secondary Education	8 hrs.
Supervised Student Teaching	8 hrs.
Elective in Education	7 hrs.

Recommended curricula will be found outlined at the beginning of departments selected as majors.

The Standard High School Certificate valid for five years shall be issued to a person who has completed a baccalaureate degree for the training of high school teachers and who, in addition thereto, has completed the requirements for the Master's degree in a standard college or university.

The Provisional Certificate in Administration and Supervision valid for four years shall be issued to a person who has had at least two years of successful teaching experience and who is a graduate of a standard four-year college or university and who has completed the baccalaureate degree for the training of administrators and supervisors. The curriculum for the training of administrators and supervisors shall include in addition to the requirements for the training of elementary or high school teachers the following professional courses:

Public School Administration and Supervision	4 hrs.
Administration and Supervision of the Elementary School	4 hrs.
High School Administration and Supervision	4 hrs.
Elementary Education	8 hrs.
Supervised Student Teaching	8 hrs.
Secondary Education	8 hrs.

This certificate may be re-issued or renewed every four years after three years of experience during the life of the certificate or upon the presentation of one-half year of standard college or university work of graduate grade.

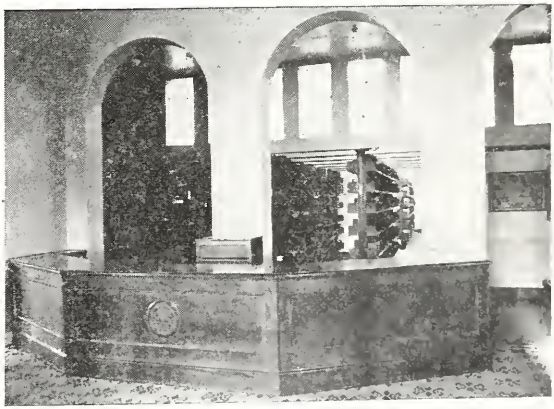
The Standard Certificate in Administration and Supervision valid for five years shall be issued to a person who has had at least two years of successful teaching experience and who is a graduate of a standard four-year college or university and who has completed the baccalaureate degree for the training of administrators or supervisors and who, in addition thereto, has completed the requirements for a Master's degree. The Standard Certificate in Administration and Supervision may be extended for life upon presentation of evidence that the holder has had three years of successful experience during the life of the certificate.

The Attendance Officer's Certificate shall be issued to any person who completes a baccalaureate degree for a teacher's certificate provided such curriculum includes at least four quarter hours of pupil accounting.

THE COLLEGE LIBRARY

This building contains more than 80,000 modern volumes.

Library Reference Room



THE GRADUATE DIVISION

PURPOSE

The Graduate Division offers work leading to the degree of Master of Arts in Education. The graduate courses in Education and in minor areas are offered as part of the regular program of the College and are designed to improve classroom instruction and school administration. The graduate program is planned to meet the needs of teachers in elementary and secondary schools and to provide graduate education for school supervisors and administrators.

TYPES OF STUDENTS

Graduate courses are open to: (1) students who enter and become candidates for the degree of Master of Arts in Education; and (2) students who wish to broaden their education without reference to a graduate degree.

ADMISSION REQUIREMENTS

1. Applicants for admission to the Graduate Division must hold a Bachelor's degree from an institution of recognized standing. Students desiring admission to graduate courses should have completed the minimum professional requirements for the education of elementary or secondary teachers as prescribed by the Council on Public Higher Education in Kentucky. If the holder of a baccalaureate degree with less than the minimum professional courses desires to work for a Master of Arts degree conditions will be determined by the Dean and by an Advisory Committee.

2. Official credentials should be filed with the Registrar of the College before entrance. These credentials must include, (a) a complete transcript of high school credits; (b) a complete transcript of college or university credits. If the transcript is not on file prior to entrance, admission will be tentative pending receipt and review of credentials.

3. Application for admission to the Graduate Division must be filed by a student with the Dean of the Institution. Admission to the Graduate Division does not necessarily imply admission to candidacy for the degree of Master of Arts in Education. If an application for admission or for candidacy is approved, an up-to-date copy of the graduate student's plan of work must be kept on file in the Dean's office. The major professor and/or members of the Advisory Committee should be consulted in formulating the program. However, the graduate student is expected to show independence in planning his program and in study.

TIME AND WORK REQUIRED

The student must, (a) complete a minimum of thirty-six weeks in resident study; (b) earn a minimum of forty-five quarter hours; and (c) write a thesis in the major field. The thesis requirement may be waived provided that the student secures approval from the Dean, completes forty-eight weeks in residence, and completes a minimum of fifty-four approved quarter hours of credit.

Transferred credits may not be used to reduce the resident work at Eastern to less than 3 quarters. If the student waives the thesis, transferred credit approved by the Dean and the major professor may be applied to satisfy the additional credit requirement.

LOAD

1. The average graduate student unless special approval is secured from the Dean should take a load ranging from 12 to 16 hours per quarter with a maximum of 8 hours per summer term.

2. Part-time graduate students with full-time positions are advised to take loads ranging from 2 to 6 hours per quarter and are expected to meet the high standards prescribed for full-time students.

3. Twelve hours of graduate work earned on a part-time basis shall entitle the student to one quarter of residence.

LEVEL OF WORK

At least fifty per cent of all course work must be in the Graduate Division. The remainder of the work may be completed in the Upper Division. However, graduate students shall not receive credit for work in any course in which students from the Lower Division are concurrently enrolled.

SCHOLARSHIP

The graduate student must maintain an average standing of 2.0 and no credit shall be granted for any grade below "C".

MAJOR AND MINORS

The candidate for the Master's degree must complete a major in the field of Education. A major shall consist of a minimum of 18 quarter hours and a thesis in the major field or of 27 quarter hours if the student elects to waive the thesis.

The student must complete a minor or two minors. A minor shall consist of a minimum of 12 quarter hours. A minor shall be determined by the College in terms of the student's needs. Minors shall be taken in the Upper Division and/or Graduate Division. Minors are offered in the departments of Agriculture, Art, Biology, Chemistry, Commerce, English, French, Geography, Health and Physical Education, History, Home Economics, Industrial Arts, Latin, Mathematics, Music, Physics, and Social Science.

SEMINAR REQUIREMENTS

Seminars or research courses are required of graduate students. Two types of seminar are provided: (1) for graduate students who prepare a Master's thesis and (2) for students who do not prepare a thesis.

THE THESIS

The thesis should show, among other things, the following characteristics: (a) ability of the candidate to work independently on an approved problem; (b) a reasonable familiarity with the literature of the field of specialization; (c) a practical working knowledge of research methods; and (d) conclusions justified by supporting data.

The thesis much conform to regulations approved by the Graduate Committee for writing thesis. It must be approved by the major and minor professors and by the Dean of the College.

Two bound typewritten copies of the thesis must be filed in the College Library at least one week before the degree is conferred.

EXAMINATION

The graduate student shall, upon official notification, pass an oral and/or written examination on his major, his minor fields, and his thesis.

APPLICATION FOR DEGREE

Application for the degree of Master of Arts in Education must be filed formally with the Dean of the College not later than the tenth week prior to the date on which the degree is to be conferred. The application should have the approval of the major professor and/or the Advisory Committee.

Formal application for the degree of Master of Arts in Education must be filed with the Registrar with the approval of the Dean of the College not later than eight weeks before the degree is to be conferred.

COURSES OF INSTRUCTION

The departments of instruction in the following description of courses are arranged in alphabetical order. Schedules are prepared on the basis of recommended curricula and students who follow the recommended curricula will most easily avoid conflicts..

COURSES OF INSTRUCTION

RECOMMENDED CURRICULUM FOR A MAJOR IN AGRICULTURE

(B. S. Degree with right of teaching certificate)

First Year

1st Quarter	Hrs.	2nd Quarter	Hrs.	3rd Quarter	Hrs.
Ag. 20	4	Ag. 21	4	Ag. 11	4
Eng. 10a	3	Eng. 10b	3	Ag. 12	4
Ph. Ed. 10	½	Lib. Sci. 10	1	Eng. 10c	3
Elect.	9	Ph. Ed. 10	½	Ph. Ed. 10	½
		Elect.	8	Elect.	6
	16½		16½		17½

Second Year

Ag. 25	4	Ag. 23	4	Ag. 22	4
Chem. 11	4	Chem. 12	4	Chem. 13	4
Eng. 21a	4	Eng. 21c	4	Educ. 21	4
Hlth. 21	4	Hlth. 31	4	Soc. 14	4
Ph. Ed. 10	½	Ph. Ed. 10	½	Ph. Ed. 10	½
	16½		16½		16½

Third Year

Ag. 24	4	Ag. 32	4	Ag. 33	4
Biol. 20	4	Biol. 21	4	Educ. 34 or 44	4
Com. 28	4	Hlth. 26	4	Hist. 22	4
Ph. Ed. 21	2	Hist. 21	4	Elect.	4
Elect.	2		16		16
	16				

Fourth Year

Ag. Elect.	4	Ag. Elect.	4	Educ. 46	16
Biol. Elect.	4	Elect.	12		
Educ. 36	6				
Elect.	2				
	16		16		

Electives must be selected to meet the 40 hour general requirement and the requirement for a second major or for two minors as outlined in the section on Curricula, Degrees, and Certificates under the sub-heading entitled The Provisional High School Certificate.

Recommended Curriculum for a Second Major in Agriculture

A student with a first major in some other department may take the following courses for a second major in Agriculture: 11, 12, 20, 21, 22, 23, 24, 32, 33.

Minor

A student with a major and a minor in other departments may take the following courses for a minor in Agriculture: 11, 12, 20, 22, 31, 4 hours elective.

Recommended Curriculum for a Major in Agriculture Without Right of Teaching Certificate

The general education requirements outlined under the heading of Curricula, Degrees, and Certificates must be met. A curriculum will be furnished upon request.

AGRICULTURE

LOWER DIVISION COURSES

Agriculture 11. Farm Poultry. **Four hours.**

Breeds, poultry houses; balanced rations; poultry diseases; egg production; culling; meat production; parasites; grading and marketing of poultry produce.

Agriculture 12. General Horticulture. **Four hours.**

The farm garden and orchard small fruits; hot bed and cold frame management; vegetable storage; garden planning; seed selections; etc.

Agriculture 20. Farm Crops. **Four hours.**

Cereal and forage crops; pasture management; weed control; crop rotation; seed testing; inoculation; tillage; tillage tools and implements.

Agriculture 21. Market Milk. **Four hours.**

Milk as a food; market milk; milk sanitation; dairy inspection; bacteriology of milk; scoring milk and cream; laboratory tests for various dairy products production costs; pasteurization; refrigeration; etc.

Agriculture 22. Dairy Cattle Management. **Four hours.**

Dairy breeds; judging; feeding; calf raising; pedigrees; production testing; dairy barn construction; equipment; etc.

Agriculture 23. Farm Shop. **Four hours.**

Care and maintenance of farm machinery; farm repairs; soldering; pipe cutting; farm gates; etc.

Agriculutre 24. Farm Engineering. **Four hours.**

Drainage; terracing; farm surveying; farm planning; farm buildings; concrete work; farm fences.

Agriculture 25. Farm Livestock Production. **Four hours.**

Importance and use of livestock products; present types, market classes and grades of beef cattle, sheep, swine, horses and mules; the origin, development, and characteristics of the more important breeds.

UPPER DIVISION COURSES

(Open only to Junior, Senior, and Graduate Students)

Agriculture 30. Soils. **Four hours.**

Prerequisites: Chemistry 11 and 12.

Soil composition; soil conservation; soil microorganisms; humus; soil water; soil minerals; lime; commercial fertilizers; soil analysis; soil erosion; etc.

Agriculture 31. Feeds and Feeding. **Four hours.**

Prerequisite: Chemistry 11 and 12.

Origin and composition of livestock feeds; digestion and assimilation; balanced rations; minerals; feed costs; feeding young animals; feeding growing animals; finished feeding; etc.

Agriculture 32. Farm Management and Organization. **Four hours.**

Personal characteristics desirable to successful farming; cost of production; living costs; profits; types of farming; soil productivity; livestock problems; farm labor; farm rent; farm equipment; farm layout.

Agriculture 33. Farm Accounting. **Four hours.**

The fundamental principles of accounting applied to farm accounts; double entry bookkeeping; financial statements; operating statements; inventories; depreciation; production costs; etc.

Agriculture 40. Dairy Bacteriology. **Four hours.**
Prerequisite: Health 21.
Microorganisms in dairy products; bacterial control; use of starters; sanitary analysis of milk and dairy products; etc.

Agriculture 41. Agricultural Economics and Marketing. **Four hours.**
The principles of economics and marketing as applied to agriculture; a study of the agricultural industry from historic, geographic and economic approaches.

Agriculture 42. Agricultural Journalism. **Four hours.**
Advertisements; sales letters; news letters; minute recording; feature articles; survey of agricultural journals; editorial writing.
Practicums. One hour.
Prerequisite: A course to which the practicum applies.

RECOMMENDED CURRICULUM FOR A MAJOR IN ART

(A. B. Degree with right of teaching certificate)

First Year

1st Quarter	Hrs.	2nd Quarter	Hrs.	3rd Quarter	Hrs.
Art 10	4	Art 11	4	Art 20 or 21	4
Eng. 10a	3	Eng. 10b	3	Eng. 10c	3
Hist. 10	4	Hist. 11	4	Hlth. 10	2
Ph. Ed. 10	½	Lib. Sci. 10	1	Ph. Ed. 10	½
Soc. 10	1	Ph. Ed. 10	½	Elect.	8
Elect.	4	Elect.	4		
	16½		16½		17½

Second Year

Art 26	4	Art 22	2	Educ. 21	4
Eng. 21a	4	Art 23	2	Mus. 27	4
Hlth. 26	4	Eng. 21c	4	Ph. Ed. 10	½
Ind. Arts 10	4	Ind. Arts 13	4	Ph. Ed. 21	2
Ph. Ed. 10	½	Ph. Ed. 10	½	Elect.	6
		Elect.	4		
	16½		16½		16½

Third Year

Art 29	2	Art 33	4	Art 30	4
Art 31	4	Educ. 34 or 44	4	Educ. 36	6
Educ. 30 or 41	2	Elect.	8	Elect.	6
Elect.	8				
	16		16		16

Fourth Year

Art 40 or 41	4	Educ. 46	16	Elect.	16
Art 36 or 46	4				
Elect.	8				
	16				

Electives must be selected to meet the 40 hour general requirement and the requirement for a second major or for two minors as outlined in the section on Curricula, Degrees, and Certificates under the sub-heading entitled The Provisional High School Certificate.

Recommended Curriculum for a Second Major in Art

A student with a first major in some other department may take the following courses for a second major in Art: 10, 11, 22, 23, 26, 30, 31, 33, 36, 40 or 41.

Minor

A student with a major and a minor in other departments may take the following courses for a minor in Art: 10, 22, 23, 26, 31, 33, 4 hours elective.

Recommended Curriculum for a Major in Art Without Right of Teaching Certificate

The general education requirements outlined under the heading of Curricula, Degrees, and Certificate must be met. A curriculum will be furnished upon request.

ART

LOWER DIVISION COURSES

Art 10. Elementary Drawing and Design. **Four hours.**

Introductory contact with the nature and practice of art and with basic knowledges and skills in drawing, design and color; an essential foundation course for the art student, the home economics major, and the elementary education major. Media: Pencil, tempera, water color, and crayons.

Art 11. Art Media. **Four hours.**

Prerequisite: Art 10.

Designed to meet individual needs and abilities in a variety of art media; problems in figure drawing and painting; charcoal, pen and ink, pastel, water color, tempera, colored chalk, pencil, and oils.

Art 20. Drawing, Painting, and Composition. **Four hours.**

Prerequisite: Art 10.

Technical skill and creative ability in the use of charcoal, pastels, oils, and water colors; study of still life; out-door sketching; figure composition; artistic anatomy.

Art 21. Drawing and Modeling. **Four hours.**

Prerequisite: Art 10.

Practice in drawing and painting from the view of expressing form; use of clay for the development of a stronger sense of form; objects molded by hand and on the potter's wheel.

Art 22. Art Appreciation: Orientation. **Two hours.**

Interpretation of the visual and space arts for the purose of establishing a basis for judgment and good taste in art expression.

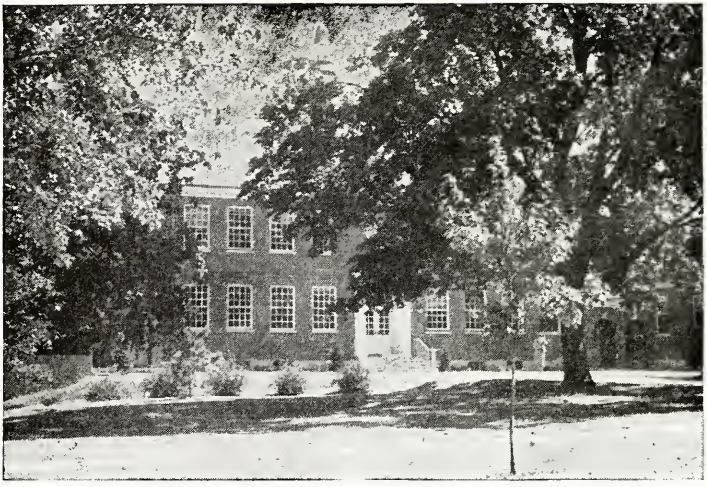
Art 23. Lettering and Poster Design. **Two hours.**

Development of ability to apply art principles in the production of hand lettering and effective posters; lettering structure; spacing; poster design.

Art 24. Problems in Interior Design. **Two hours.**

Prerequisite: Art 10.

A survey of the principles of design in all interiors with emphasis on the house, its interior and exterior; art elements—color form, line, and texture in furniture and furnishings; finishes; problems in house plans and blueprint reading.



ARTS BUILDING

Instrument Class

A class in Lettering and Poster Design

Art 25. Fashion Illustrations. **Two hours.**

Principles of design in costume; problems designed to enable the student to acquire the ability to represent the costume in different art media and to help him understand technical problems of fashion illustration; commercial layouts.

Art 26. Public Shcool Art. **Four hours.**

Lettering, design, color, and construction work in the elementary school; art problems based on content essentials; integration of art with the subject matter of the general curriculum.

Art 27. Applied Design. **Four hours.**

Craftsmanship in the use of design as applied to functional objects: Stenciling, linoleum cuts, leather tooling, book making, weaving, enameling, needlework, and soap carving.

Art 28. Advanced Applied Design. **Four hours.**

Prerequisite: Art 27.

This course emphasizes design in weaving, advanced leather tooling, etching, and linoleum block printing. Rugs and table mats are woven from waste and commercial materials on the various looms, such as card, tack, and large two and four heddle types.

Art 29. Design. **Two hours.**

A course emphasizing the theory of design in the mediums of clay, paper, wood, and thread. Formal drill in the main elements of design to meet the needs of the student who wishes to become more efficient in creative and structural design.

UPPER DIVISION COURSES

(Open only to Junior, Senior, and Graduate Students)

Art 30. Drawing and Illustration. **Four hours.**

Prerequisite: Art 10.

Creative skill in drawing and illustration of ideas; specific study of perspective; pictorial composition; illustration of stories and murals in black and white, and in color.

Art 31. Color and Design. **Four hours.**

Prerequisite: Art 10.

Technical practice in design; decorative rendering; practice in the making of folders; packaging; advertisements; posters; color theory.

Art 33. Art appreciation: Survey. **Four hours.**

A survey of architecture, sculpture, painting, and the minor arts; art of the Near East; classical art; medieval art; Renaissance art; post-Renaissance art; art in the United States; primitive art; Oriental art.

Art 36. Art Education in the Elementary School. **Four hours.**

Prerequisites: Art 10 and 26.

Designed to give teachers a knowledge of theories and practice of art in their school problems and to give opportunity to work out art projects in the various art media unit planning; materials and methods.

Art 40. Advanced Drawing, Painting, and Design. **Four hours.**

Prerequisite: Art 30.

Advanced practice in drawing, painting, and design; research in artist's media.

Art 41. Advanced Drawing, Painting, and Design. **Four hours.**

Prerequisite: Art 30.

Painting from nature; field trips; studio criticism; creative design problems; figure compositions in selected media.

Art 42. Art Appreciation: Architecture and Sculpture. **Four hours.**
Prerequisite: Art 33.
Achievements in architecture and sculpture of the following periods: Prehistoric, preclassical, Greek, Roman, Early Christian, Byzantine, Romanesque, Gothic, Renaissance, post-Renaissance, and Modern.

Art 43. Art Appreciation: Painting. **Four hours.**
Prerequisite: Art 33.
Great periods and masters of art: Italian, Flemish, German, Spanish, Dutch, English, French, and American.

Art 46. Art Education in the Secondary School. **Two hours.**
Prerequisite: Art 10.
Methods of teaching art education in the secondary school.

RECOMMENDED CURRICULUM FOR A MAJOR IN BIOLOGY

(B. S. Degree with right of teaching certificate)

First Year

1st Quarter	Hrs.	2nd Quarter	Hrs.	3rd Quarter	Hrs.
Biol. 10	4	Biol. 11	4	Biol. 12	4
Eng. 10a	3	Eng. 10b	3	Eng. 10c	3
Math. 10	4	Lib. Sci. 10	1	Math. 12	4
Ph. Ed. 10	½	Math. 11	4	Ph. Ed. 10	½
Soc. 10	1	Ph. Ed. 10	½	Elect.	4 or 6
Elect.	4	Elect.	4		
	16½		16½		15½ to 17½

Second Year

Biol. 27	4	Biol. 28	4	Biol. 29	4
Chem. 11	4	Chem. 12	4	Chem. 13	4
Eng. 21a	4	Eng. 21c	4	Ph. Ed. 10	½
Ph. Ed. 10	½	Ph. Ed. 10	½	Elect.	8
Elect.	4	Elect.	4		
	16½		16½		16½

Third Year

Biol. 20	4	Biol. 21	4	Biol. 30	2
Educ. 21	4	Hlth. 26	4	Educ. 41	2
Ph. Ed. 21	2	Phys. 21	4	Phys. 22	4
Phys. 20	4	Sci. Elect.	4	Sci. Elect.	4
Sci. Elect.	2			Elect.	4
	16		16		16

Fourth Year

Biol. 31	2	Educ. 36	6	Educ. 46	16
Sci. Elect.	4	Sci. Elect.	4		
Elect.	10	Elect.	6		
	16		16		

Electives must be selected to meet the 40 hour general requirement as outlined in the section on Curricula, Degrees, and Certificates under the subheading The Provisional High School Certificate.

Recommended Curriculum for a Second Major in Biology

A student with a first major in some other department may take the following courses for a second major in Biology: 10, 11, 12, 20, 21, 27, 28, 29, 4 hours elective.

Minor

A student with a major and a minor in other departments may take the following courses for a minor in Biology: 10, 11, 12, and 12 hours elective.

Recommended Curriculum for a Major in Biology Without Right of Teaching Certificate

The general education requirements outlined under the heading of Curricula, Degrees, and Certificates must be met. A curriculum will be furnished upon request.

BIOLOGY

LOWER DIVISION COURSES

Biology 10. General Biology I. **Four hours.** Fee, $1.00.

Methods of science; characteristics of living things; the cell, the unit of life; the physical basis of life; the thallus plant; bacteria; liverworts and mosses; ferns and their relatives; alternation of generations and its significance; the gymnosperms; the angiosperms; roots, stems, and leaves of seed plants; plant physiology; evolution in the plant kingdom; economic importance of plants.

Biology 11. General Biology II. **Four hours.** Fee, $1.00.

Prerequisite: Biology 10.

Unicellular animals; sponges; coelenterates; flat worms; round worms; segmented worms; arthropods; echinoderms; mollucks; chordates.

Biology 12. General Biology III. **Four hours.** Fee, $1.00.

Prerequisite: Biology 11.

Anatomy and physiology of the frog and man; external features; skeleton; muscles; body cavity; digestive system; respiratory system; excretory system; metabolism; circulatory system; nervous system; sense organs; endocrines; reproduction; embryology; heredity; evolution; early man.

Biology 20. Botany I. **Four hours.** Fee, $1.00.

Cell structure, functions and growth; anatomy; histology, general physiology and economics of roots, stems and leaves of vascular plants.

Biology 21. Botany II. **Four hours.** Fee, $1.00.

Prerequisite: Biology 20.

Anatomy, histology and general physiology of flowers, fruits, and seeds: economic applications of plant science including forestry, conservation, agriculture, plant breeding and plant diseases; history of botany.

Biology 25. Applied Anatomy and Physiology. **Four hours.** Fee, $1.00

Prerequisite: Biology 12.

The anatomy of the human body with emphasis on the skeleton, muscles and the nervous system and their function in physical exercise.

Biology 26. Nature Study. **Four hours.** Fee, $1.00.

Open only to majors in Elementary Education.

Animal life, including a study of birds, fish, reptiles, mammals and insects; plant life, including wild flowers, cultivated flowers, flowerless plants

and tree study; elementary studies of the earth and sky, including soil, weather, stars and constellations; proper methods of correlating such information with the subjects of health, geography, drawing, history, and arithmetic.

Biology 27. Comparative Anatomy I. **Four hours.** Fee, $1.00.

Prerequisite: Biology 12.

Vertebrate characteristics; classification of vertebrates; comparative anatomy of the integument, skeleton, muscles, digestive and circulatory systems; emphasis on the anatomy of a lower chordate, fish, reptile and bird.

Biology 28. Comparative Anatomy II. **Four hours.** Fee, $1.00.

Prerequisite: Biology 27.

Comparative anatomy of the respiratory, excretory, reproductive, endocrine, nervous and sensory systems; emphasis on the anatomy of a cat and the human body.

Biology 29. Human Physiology. **Four hours.** Fee, $1.00

Prerequisite: Biology 12.

The general physiology of metabolic processes with special attention given to digestion, circulation, respiration, and excretion.

Biology 29h. Human Physiology. **Four hours.** Fee, $1.00.

Prerequisite: A major in Home Economics.

A human physiology course specially adapted for a Home Economics major.

UPPER DIVISION COURSES

(Open only to Junior, Senior, and Graduate Students)

Biology 30. Local Flora. **Two hours.** Fee, $1.00.

Taxonomy; nomenclature; identification of spring flowers; relationships of the common families of plants; methods of making an herbarium.

Biology 31. Dendrology. **Two hours.** Fee, $1.00.

Systems of classification; nomenclature; available keys and manuals; identification of trees and shrubs on the basis of leaf characters and on the basis of twig-trunk characters.

Biology 32. Plant Physiology. **Four hours.** Fee, $1.00.

Prerequisite: Biology 20.

Principles of growth; nutrition; metabolism and movement in plants; influence of physical and biotic environments on plant growth.

Biology 35. Genetics. **Four hours.** Fee, $1.00.

Prerequisite: Biology 12 or 21.

Mendel and Mendel's laws; recent workers including T. H. Morgan; chromosome theory of heredity; linkage; crossing over; interference; biometrics; race betterment; race deterioration.

Biology 37. Economic Entomology. **Four hours.** Fee, $1.00.

Prerequisite: Biology 12.

Taxonomy of insects; anatomy and physiology of insects; life histories; economic importance; methods of control; collection of important economic insects.

Biology 38. Ornithology. **Two hours.** Fee, $1.00.

Classification and identification of birds; field trips; bird banding, migration and refuges; foods of birds; economic importance of birds.

Biology 44. Invertebrate Zoology. **Four hours.** Fee, $1.00.

Prerequisite: Biology 12.

Protozoa; porifera; coelenterata; ctenophora; platyhelminthes; nemathelminthes; annelida; echinodermata; mollusca arthropoda; characteristics, life histories, structures, and ecology with a discussion of their evolution.

Biology 45. Parasitology. **Four hours.** Fee, $1.00.

Prerequisite: Biology 12.

Protozoa-Sarcodina (amoebic dysentery); Mastigophora (Trypanosames); Spirocheatacea; Infusoria; Sporozoa, including various types of malaria; Platyhelminthes (flukes and tapes); Nemathelminthes (ascaris, hook worm, trichina, whip work, elephantiasis, guinea worm, etc.); prevalence of parasitic worms and remedial measures; animal parasites among Mullusca, Annelida, and Arthropoda; Archnida (mites and ticks); Arthropoda (lice, bed bugs, fleas, flies, mosquitoes); poisonous animals.

Biology 47. Embryology. **Four hours.** Fee, $1.00.

Prerequisite: Biology 28.

Complete study of the embryology of the starfish, frog, and chicken, with considerable work on mammalian embryology.

Biology 48. Animal Physiology. **Four hours.** Fee, $1.00.

Prerequisite: Biology 28.

Detailed studies on the chemistry and physics of muscles, respiration, reproduction, excretion, nervous system, circulation, and digestion.

Biology 49. Problems in Biology. **Two or four hours.** Fee, $1.00.

Prerequisite: Permission of the instructor.

The individual study of special problems in biology.

RECOMMENDED CURRICULUM FOR A MAJOR IN CHEMISTRY

(B. S. Degree with right of teaching certificate)

First Year

1st Quarter	Hrs.	2nd Quarter	Hrs.	3rd Quarter	Hrs.
Biol. 10	4	Biol. 11	4	Biol. 12	4
Chem. 11	4	Chem. 12	4	Chem. 13	4
Eng. 10a	3	Eng. 10b	3	Com. 15a	2
Math. 10	4	Lib. Sci. 10	1	Eng. 10c	3
Ph. Ed. 10	½	Math. 11	4	Math. 12	4
Soc. 10	1	Ph. Ed. 10	½	Ph. Ed. 10	½
	16½		16½		17½

Second Year

Chem. 21	4	Chem. 23	4	Chem. 24	4
Eng. 21a	4	Eng. 21c	4	Hlth. 26	4
Math. 21	4	Math. 22	4	Math. 23	4
Ph. Ed. 10	½	Ph. Ed. 10	½	Ph. Ed. 10	½
Phys. 20	4	Phys. 21	4	Phys. 22	4
	16½		16½		16½

Third Year

Chem. 26	4	Chem. 27	4	Chem. 28	4
Chem. 41	4	Chem. 42	4	Chem. 43	4
Ph. Ed. 21	2	Educ. 21	4	Educ. 34 or 44	4
Elect.	6	Elect.	4	Elect.	4
	16		16		16

Fourth Year

Math. 30	4	Educ. 36	6	Educ. 46	16
Sci. 45	4	Geol. 20	4		
Elect.	8	Elect.	6		
	16		16		

Electives must be selected to meet the 40 hour general requirement as outlined in the section on Curricula, Degrees, and Certificates under the subheading The Provisional High School Certificate.

Recommended Curriculum for a Second Major in Chemistry

A student with a first major in some other department may take the following courses for a second major in Chemistry: 11, 12, 13, 21, 23, 24, 26, 27, 41.

Minor

A student with a major and a minor in other departments may take the following courses for a minor in Chemistry: 11 12, 13, 21, 23, 26.

Recommended Curriculum for a Major in Chemistry Without Right of Teaching Certificate

The general education requirements outlined under the heading of Curricula, Degrees, and Certificates must be met. A curriculum will be furnished upon request.

CHEMISTRY

LOWER DIVISION COURSES

Chemistry 11. General Chemistry I. **Four hours.** Fee, $1.00.

History of chemistry; chemical nature of matter; preparation and properties of oxygen, hydrogen, and nitrogen; the gas laws; chemistry of water; laws of chemical combinations; explanation of chemical symbolism.

Chemistry 12. General Chemistry II. **Four hours.** Fee, $1.00.

Prerequisite: Chemistry 11.

The periodic law; equilibrium; structure of the atom; theory of solutions; the nitrogen family, colloids.

Chemistry 13. General Chemistry III. **Four hours.** Fee, $1.00.

Prerequisites: Chemistry 11 and 12.

Carbon and its compounds; electrochemistry; ceramics; the iron family.

Chemistry 20. Bio-Organic Chemistry. **Four hours.** Fee, $1.00.

Open only to majors in home economics.

Prerequisites: Chemistry 11, 12 and 13.

The organic chemistry of foods; the organic chemistry of digestion; the organic chemistry of metabolism.

Chemistry 21. Qualitative Analysis. **Four hours.** Fee, $1.00

Prerequisites: Chemistry 11, 12 and 13.

Chemistry of metals; analytical reactions of cations and anions; solutions; ionization; equilibrium; oxidation-reduction; complex-ion formation.

Chemistry 22. Advanced Qualitative Analysis. **Two hours.** Fee, $1.00.

Prerequisite: Chemistry 21.

Analysis of alloys, minerals and other substances; introduction to mineralogy and spectroscopy.

Chemistry 23. Quantitative Analysis, Gravimetric. **Four hours,** Fee, $1.00.

Prerequisite: Chemistry 21.

Principles and practices of gravimetric analysis of various inorganic substances; chemical calculations; equilibrium; solubility product principles; theory of precipitation.

Chemistry 24. Quantitative Analysis, Volumetric. **Four hours.** Fee, $1.00.
Prerequisite: Chemistry 21.
Principles and practices of volumetric analysis of various inorganic substances; acid-base titration; oxidation-reduction titrations; precipitation titrations; theory of acids and bases; theory of oxidation and reduction; calculations of volumetric analysis.

Chemistry 25. Advanced Quantitative Analysis. **Four hours.** Fee, $1.00
Prerequisites: Chemistry 23 and 24.
Analysis of ores; potentiometric titrations; colorimetric determinations; polariscopic determinations; gas analysis; combustion train.

Chemistry 26. Organic Chemistry. **Four hours.** Fee, $1.00.
Prerequisites: Chemistry 11, 12 and 13.
The methane series and their derivatives; the ethylene series and their derivatives; the acetylene series and their derivatives.

Chemistry 27. Organic Chemistry. **Four hours.** Fee, $1.00.
Prerequisite: Chemistry 26.
Homocyclic hydrocarbons and their derivatives.

Chemistry 28. Advanced Organic Chemistry. **Four hours.** Fee, $1.00.
Prerequisites: Chemistry 26 and 27.
Heterocyclic compounds and their derivatives; dyes, drugs, theory of color.

UPPER DIVISION COURSES

(Open only to Junior, Senior, and Graduate Students)

Chemistry 33. Food Chemistry. **Four hours.** Fee, $1.00.
Prerequisite: Chemistry 20 (for home economics students).
The chemistry of glucids; the chemistry of fats; the chemistry of proteins; vitaminology; the energetics of foods.

Chemistry 34. Biochemistry. **Four hours.** Fee, $1.00.
Prerequisites: Chemistry 20 and 33.
The chemistry of digestion; chemistry of metabolism; blood analysis; urine analysis.

Chemistry 41. Physical Chemistry. **Four hours.** Fee, $1.00.
Prerequisite: Chemistry 23.
Properties of gases, liquids and solids; physical properties and molecular structure; first law of thermodynamics; heat capacity; thermochemistry; second law of thermodynamics; solutions.

Chemistry 42. Physical Chemistry. **Four hours.** Fee, $1.00.
Prerequisite: Chemistry 41.
Colloids; chemical equilibrium; phase rule; reaction rates; activation of molecules; catalysis.

Chemistry 43. Physical Chemistry. **Four hours.** Fee, $1.00.
Prerequisite: Chemistry 42.
Electrical conductance; electromotive force; ionic equilibria; chemical thermodynamics; atomic structure; nuclear structure.

Chemistry 49. Problems in Chemistry. **Four hours.** Fee, $1.00.
Prerequisite: Senior standing in chemistry.
Individual investigations in any of the fields of chemistry.

RECOMMENDED CURRICULUM FOR A MAJOR IN COMMERCE

(B. S. Degree with right of teaching certificate)

First Year

1st Quarter	Hrs.	2nd Quarter	Hrs.	3rd Quarter	Hrs.
Com. 5.	1	Com. 14b	2	Com. 16a	2
Com. 14a	2	Com. 15b	2	Eng. 10c	3
Com. 15a	2	Eng. 10b	3	Hist. 11	4
Eng. 10a	3	Hist. 10	4	Math. 10	4
Gov. 10	4	Lib. Sci. 10	1	Ph. Ed. 10	½
Ph. Ed. 10	½	Ph. Ed. 10	½	Sci.	4
Soc. 10	1	Sci.	4		
Elect	2 to 4				
	15½ to 17½		16½		17½

Second Year

Com. 10	4	Com. 11	4	Com. 12	4
Com. 16b	2	Com. 27b	4	Com. 27c	4
Com. 27a	4	Eng. 21c	4	Ph. Ed. 10	½
Eng. 21a	4	Ph. Ed. 10	½	Soc. Sci. Elect.	4
Ph. Ed. 10	½	Restricted Elect.	4	Restricted Elect.	4
Elect.	2				
	16½		16½		16½

Third Year

Com. 23	4	Com. 27e	4	Com. Elect.	8
Com. 27d	4	Com. 29	4	Educ. 41	2
Com. 28	4	Com. 40	4	Hlth. Elect.	4
Educ. 21	4	Hlth. 26	4	Ph. Ed. 21	2
				Elect.	2
	16		16		18

Fourth Year

Com. 36a	4	Com. 36b	4	Educ. 46	16
Com. Elect.	4	Elect.	12		
Educ. 34	4				
Educ. 36	6				
	18		16		

Electives must be selected to meet the 40 hour general requirement as outlined in the section on Curricula, Degrees, and Certificates under the subheading The Provisional High School Certificate.

Recommended Curriculum for a Second Major in Commerce

A student with a first major in some other department may take the following courses for a second major in Commerce: 14a, 14b, 15a, 15b, 10, 11, 12, 28, 29, 8 hours elective or 14a, 14b, 15a, 15b, 16a, 16b, 27a, 27b, 27c, 10, 11, 12.

Minor

A student with a major and a minor in other departments may take the following courses for a minor in Commerce: 14a, 14b, 15a, 15b, 10, 11, 12, 4 hours elective or 14a, 14b, 15a, 15b, 16a, 16b, 27a, 27b, 10.

Recommended Curriculum for a Major in Commerce Without Right of Teaching Certificate

The general education requirements outlined under the heading of Curricula, Degrees, and Certificates must be met. The curriculum will be furnished upon request.

COMMERCE

LOWER DIVISION COURSES

Commerce 5. Penmanship. **One hour.**
Characteristics of good handwriting; illustrations of good handwriting; practice in developing desirable skills in executing legibile handwriting; methods of teaching handwriting.

Commerce 10. Elementary Accounting. **Four hours.**
The accounting equation; the balance sheet; the profit and loss statement; books of original entry; the ledger; adjusting and closing entries; controlling accounts; promissory notes; interest; discount; analysis of financial statements; valuation accounts; accrued and deferred items.

Commerce 11. Principles of Accounting. **Four hours.**
Vouchers; partnership accounting. A laboratory set of books is kept.

Commerce 12. Principles of Accounting. **Four hours.**
Corporation accounting; personal accounting; introduction to cost, departmental, manufacturing, and branch accounting. A laboratory set of books is kept.

Commerce 14a. Business Mathematics I. **Two hours.**
Rapid calculation in the fundamental processes; drawings and graphs; percentage; buying and selling merchandise; commercial discounts; recording purchases and sales; paying for goods; collecting bills; accounts; fractions; aliquot parts; decimal fractions; pay rolls; interest.

Commerce 14b. Business Mathematics II. **Two hours.**
Installment buying; bank discount; partial payments: profit and loss; commission and brokerage; marked price; taxes; insurance; stocks; bonds; civil service problems.

Commerce 15a. Beginning Typewriting. **Two hours.** Fee, $1.00.
Correct writing technique; knowledge and care of the machine; personal typing problems.

Commerce 15b. Intermediate Typewriting. **Two hours.** Fee, $1.00.
Prerequisite: Commerce 15a or its equivalent.
Speed and accuracy drills; business letters; use of carbon paper; tabulating; term papers and notebooks; stencils.

Commerce 16a. Office Practice. **Two hours.** Fee, $1.00.
Prerequisite: Commerce 15b or its equivalent.
Speed building; business papers; rough drafts; manuscripts; reports; use of office machines.

Commerce 16b. Office Practice. **Two hours.** Fee, $1.00.
Continuation of Commerce 16a.

Commerce 17. Economic History of Europe. **Four hours.**
The history of the development of agriculture, commerce, transportation, industry, labor legislation, socialism, social insurance, population and population trends, and finance in the principal European nations.

Commerce 18. Filing. **One hour.**

Principles and practices of alphabetic, numeric, subject, and geographic filing.

Commerce 20a. Principles of Accounting—Advanced. **Four hours.**

The accounting process illustrated; statements from incomplete data; cash and receivables; inventories; investments; fixed assets; deferred charges; liabilities; capital stock; surplus; installment sales; errors and their correction; statement of application of funds.

Commerce 20b. Principles of Accounting—Advanced. **Four hours.**

Analysis of financial statements; partnership formation and operation; partnership dissolution and liquidation; joint ventures; consignments; agency and branch accounts; corporate combination and consolidated balance sheet; consolidated statement of profit and loss; statement of affairs; receivership accounts and statements.

Commerce 23. Business English. **Four hours.**

Editing and writing of business letters and reports.

Commerce 26. Consumer Economics. **Four hours.**

The role of consumers in economic life; consumers' choice; who guides consumers; freedom of choice; custom-made wants; choosing goods for display; fashion-made wants; imitative wants; producer-made wants; the profitable practice of fraud; price appeal; making it easy to buy; consumer education; planning expenditures; intelligent buying; co-operative buying; buying protection; buying shelter; buying investments; producer aids to consumers; standards of consumers; governmental aids to consumers.

Commerce 27a. Beginning Shorthand. **Four hours.**

Prerequisite: Commerce 15a or its equivalent.

Principles of Gregg shorthand taught by modified functional method; dictation and transcription.

Commerce 27b. Intermediate Shorthand. **Four hours.**

Continuation of Commerce 27a.

Commerce 27c. Advanced Shorthand. **Four hours.**

Prerequisite: Commerce 23.

Continuation of 27b. Introduction to transcription of shorthand notes on the typewriter.

Commerce 27d. Dictation and Transcription. **Four hours.**

Prerequisite: Commerce 27c.

Building shorthand vocabulary; dictation and transcription.

Commerce 27e. Secretarial Practice. **Four hours.**

Dictation and transcription; study of secretarial traits and duties; office experience.

Commerce 28. Principles of Economics. **Four hours.**

Industry and economics; production and related concepts; specialization; competition; cooperation; the time-consuming production process; combining the agents of production; the organization of the business enterprise; risk in industry, the monetary system; the banking system; the fluctuating price level; monetary aspects of economic balance; the business cycle.

Commerce 29. Value and distribution. **Four hours.**

Individual prices; the background of demand and supply; prices under pure and monopolistic competition; interrelated prices and the price system; the mechanism of international trade; the economy of international trade; the share of income; the wages of labor; interest; income from land; the profits of the business enterprises.

UPPER DIVISION COURSES

(Open only to Junior, Senior, and Graduate Students)

Commerce 30. Cost Accounting. **Four hours.**

Profit; surplus; dividend; classification of costs; process and specific order; use of cost records; perpetual inventories; materials; labor costs; manufacturing expenses; distribution of service department costs; distribution of manufacturing expense of production; the cost to make and sell; estimating cost systems; establishment of standard costs; the use of standard costs; some legal phases of cost accounting. A set of books dealing with cost accounting will be kept.

Commerce 31. Income Tax Accounting. **Four hours.**

Income tax legislation—Federal and State; returns for individuals; exempt income of individuals; deductions allowed individuals; computation of individual taxes; returns for corporations; accounting procedure; administrative procedure; the capital stock tax; the excess profits tax; the estate tax; the gift tax; excise taxes. Students will have experience filling out income tax return forms.

Commerce 32. Business Organization. **Four hours.**

Prerequisite: Commerce 28.

Classes of business organization, their evolution, and the tests of efficiency; individual entrepreneur organization; partnership; corporation; joint-stock company; business trusts; simple agreements and price combinations; pools; combination trusts; community-of-interest organization; holding company; amalgamations; mergers; promotion; underwriting; stock exchanges; reorganizations and receiverships; legislation.

Commerce 33. American Economic History. **Four hours.**

Historical development of commerce, industry, transportation, banking, labor problems, business organization, monetary problems, and agriculture in the United States.

Commerce 34. Mathematics of Finance. **Four hours.**

Bank discount; true discount and present value; exact interest; logarithms; equation of accounts; domestic and foreign exchange; series annuities; bond valuation; business graphs; cumulative annuities; cumulative sinking funds; cumulative amortization plans; building and loan association calculations; industrial loans.

Commerce 35. Salesmanship. **Four hours.**

The art of selling: the motive behind all buying; the customer's mental journey; attitudes of buyer and salesman; preparation of the selling talk; the pre-approach; the interview; arousing interest; creating desire; answering objections; meeting excuses; diplomacy of the close; types of customers.

Commerce 36a. Methods of Teaching Stenography. **Four hours.**

This course is a prerequisite to student teaching in commerce.

Survey of modern methods of teaching Gregg shorthand, type-writing, and secretarial practice; psychology of skill development; lesson planning and presentation; observation of classroom procedures; supplies and equipment; development of skill in writing shorthand on the blackboard.

Commerce 36b. Methods of Teaching Bookkeeping, Accounting, and General Business. **Four hours.**

This course is a prerequisite to student teaching in commerce.

Objectives in giving bookkeeping, accounting, and general business courses; textbooks suitable for use; supplementary material; methods of approach; how to teach certain phases of our financial life; communication; travel and transportation; buying and selling; the work at the end of a fiscal

period for bookkeepers and accountants, including accrued and deferred items, adjusting entries, working sheets, financial statements, closing entries; suitable examinations.

Commerce 37. Advertising. **Four hours.**

The specific purpose of advertising; developing the copy; slogans; trademarks; layouts; engraving; scheduling of advertisements in newspapers and magazines; direct mail advertising; outdoor advertising; dealer display advertising; economic aspects of advertising; federal laws affecting advertising.

Commerce 38. Money and Banking. **Four hours.**

Prerequisite: Commerce 28.

Nature and functions of money; kinds of money; monetary systems; history of banking; functions of the bank; bank administration; the national banking system; deposits and depositors; the clearing house; domestic and foreign exchange; loans and discounts; bank supervision; savings banks; trust companies; foreign banking systems; the federal reserve system.

Commerce 39. Principles of Applied Economics. **Four hours.**

Economic science and its application; consumption and the guidance of industry; wastes in production; unemployment and other forms of idle power; the integration of industry; efficiency in management; industrial unrest and conflict; industrial peace; profit-sharing and joint control in industry; problems of population; efficiency in marketing; the price system and its control; regulation of public utility rates; control of banking in the United States; stabilizing our monentary system; business cycles and their control; free trade and protection; international debts and economic imperialism; the relation between government and industry; government regulation and ownership; financing the government; the revenue system of the United States; the problem of inequality; agricultural problems; types of economic organization; and important industries of the United States.

Commerce 40. Business Law. **Four hours.**

Law in general; kinds of law; persons; torts; contracts; agency; personal property; real property.

Commerce 41. Business Law. **Four hours.**

Market transactions; bailments; sales; contracts to sell; practices prejudicial to a competitor; practices prejudicial to the public; legislative regulation of market practice; bills, notes, and checks; stocks and bonds; liens and mortgages; bills of lading and warehouse receipts; contracts of guaranty and suretyship; powers of creditors; privileges of debtors.

Commerce 42. Public Finance and Taxation I. **Two hours.**

Distribution of government burdens; the general property tax; modified property tax; shifting and incidence of taxation; the income tax; death and gift taxes; special problems of taxation.

Commerce 43. Public Finance and Taxation II. **Four hours.**

A continuation of Commerce 42.

Taxes upon business; taxes upon consumption; motor vehicle taxes; the poll tax; social security taxes; the taxation of natural resources; non-tax revenues; the power to tax; tax limitations; inter-governmental relations in taxation; expenditures; state and federal aid; economy in expenditures; problems of public borrowing; fiscal administration.

Commerce 44. Investments. **Four hours.**

The importance of capital in present-day economic society; classification of securities; analyses of securities; possibilities of investment in different classes of securities; financial institutions; the mechanics of investments; the effect of taxation on investment policies; investment and the business cycle; business forecasting; the determination of an investment policy.

Commerce 45. Marketing. **Four hours.**

Prerequisite: Commerce 28.

Consumer's buying motives; marketing functions and institutions; selling direct to consumer; earlier and simpler types of retail institutions; department stores; mail-order houses; chain stores; agricultural wholesale markets; middlemen of the city agricultural markets; classes and types of wholesalers; raw materials; cooperative marketing; speculation; prices and some price policies; brands and brand policies; ethical aspects of marketing.

Commerce 46. Accounting Problems. **Two hours.**

This is an advanced course in accounting and the contents will be determined to some extent by the needs of the students registering for it. Time will be devoted to accounting systems, municipal accounting, and certain phases of recent legislation affecting accounting.

Commerce 47. Auditing. **Four hours.**

Preliminary arrangements for an audit; general procedure of an audit; the original records; the asset accounts; the liability accounts; operating accounts; the audit report. An auditing problem is worked to illustrate the principles discussed in class.

GRADUATE DIVISION COURSES

Commerce 50. History of Economic Thought. **Four hours.**

In this course a survey of economic thought and doctrine from the ancient period to the end of the classical period will be made.

Commerce 51. Economic Thought Since the Austrian School. **Four hours.**

This is a continuation of Commerce 50. The chief economical doctrines since the Austrian school will be studied.

RECOMMENDED CURRICULUM FOR A MAJOR IN ELEMENTARY EDUCATION

(B. S. Degree with right of Standard Elementary Certificate)

First Year

1st Quarter	Hrs.	2nd Quarter	Hrs.	3rd Quarter	Hrs.
Eng. 10a	3	Eng. 10b	3	Eng. 10c	3
Geog. 10	4	Hist. 11 or 22*	4	Ph. Ed. 10	½
Hist. 10 or 21*	4	Lib. Sci. 10	1	Sci.**	4
Ph. Ed. 10	½	Ph. Ed. 10	½	Elect.	9
Soc. 10	1	Sci.**	4		
Elect.	4	Elect.	4		
	16½		16½		16½

Second Year

Art 10	4	Educ. 22	4	Eng. 24	4
Educ. 21	4	Eng. 21c	4	Hlth. 26	4
Eng. 21a	4	Mus. 25ab	4	Math. 26	4
Gov. 10 or S.S.	4	Ph. Ed. 10	½	Ph. Ed. 10	½
Ph. Ed. 10	½	Ph. Ed. 20	2	Elect.***	4
		Elect.***	2		
	16½		16½		16½

Third Year

Art 26	4	Gov. 11 or S.S.	4	Educ. 26	8
Geog. 22 or 32	4	Mus. 27	4	Soc. 14 or 30	4
Sci.**	4	Sci.**	4	Elect.	4
Elect.	4	Elect.	4		
	16		16		16

Fourth Year

Educ. 46 16	Educ. 31 4	Educ. 40 4
	Elect. 12	Educ. 43 4
		Elect. 8
	16	16

* Take 8 hours in History of Civilization or 8 hours in American History.
** Science 10, 11, 20, and Biology 26 are recommended for the Standard Elementary Certificate.
*** Art 23, English 12, Industrial Arts 16 are recommended as electives leading to the Standard Elementary Certificate.

RECOMMENDED CURRICULUM FOR THE PROVISIONAL ELEMENTARY CERTIFICATE

First Year

1st Quarter	Hrs.	2nd Quarter	Hrs.	3rd Quarter	Hrs.
Eng. 10a	3	Eng. 10b	3	Eng. 10c	3
Geog. 10	4	Hist. 11 or 22	4	Educ. 19a or 20	4
Hist. 10 or 21	4	Lib. Sci. 10	1	Ph. Ed. 10	½
Ph. Ed. 10	½	Ph. Ed. 10	½	Sci. 11	4
Soc. 10	1	Sci. 10	4	Elect.	5
Elect.	4	Elect.	4		
	16½		16½		16½

Second Year

Art 26 4	Educ. 22 4	Educ. 26 8
Educ. 21 4	Hlth. 26 4	Eng. 24 4
Eng. 21a or 21c 4	Mus. 25ab 4	Ph. Ed. 10 ..... ½
Math. 26 4	Ph. Ed. 10 ..... ½	Elect. 4
Ph. Ed. 10 ..... ½	Ph. Ed. 20 2	
	Elect. 2	
16½	16½	16½

EDUCATION

LOWER DIVISION COURSES

Education 19a. Rural School Organization and Management. **Four hours.**

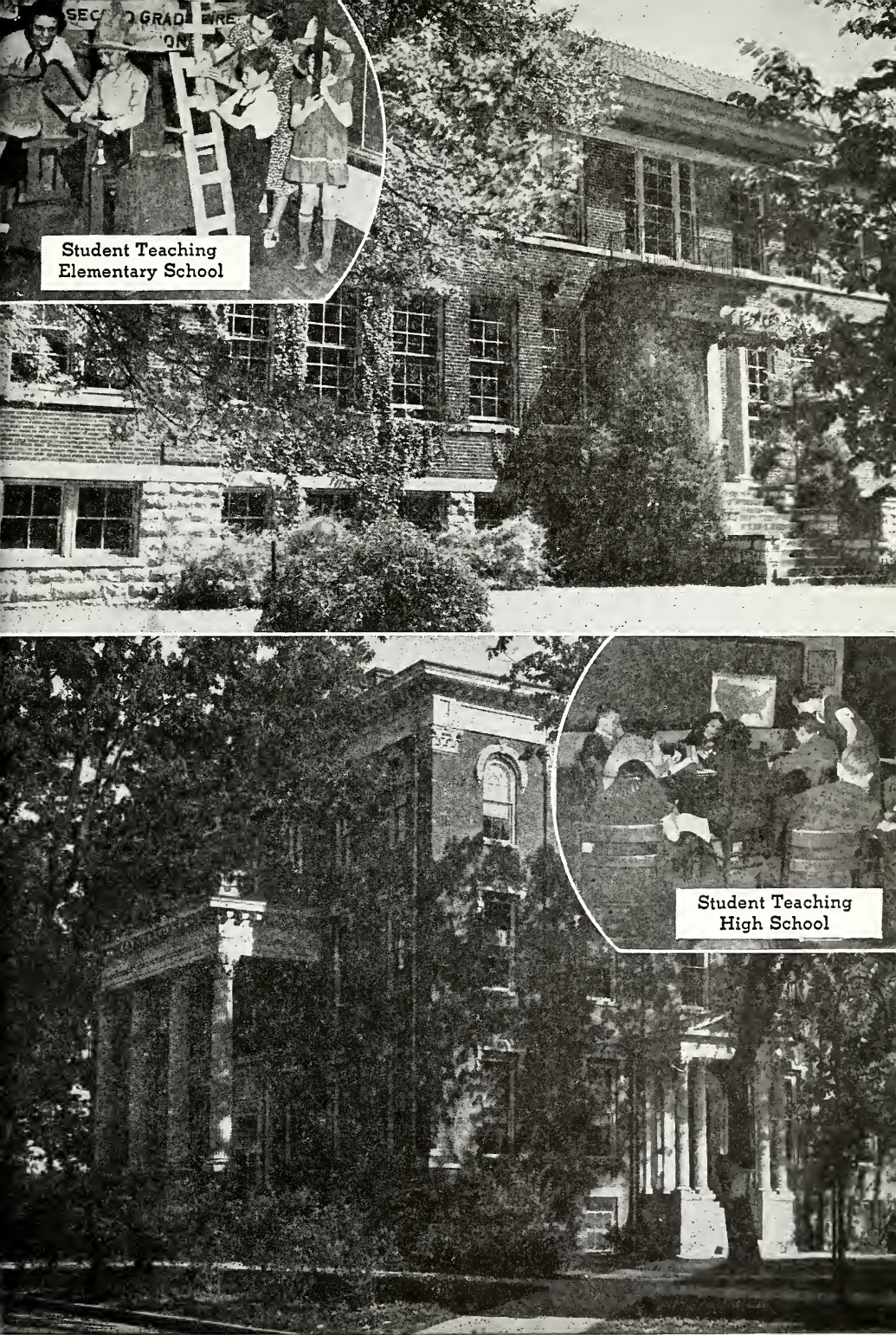
Organizing the rural elementary school; daily program; school housekeeping; understanding pupils; playground activities; school equipment and supplies; keeping records and making reports; problems of attendance; school libraries and the use of textbooks; educative seatwork and supervised study; testing and evaluating results; community cooperation; teacher qualifications and relationships.

Education 19b. Elementary School Organization and Management. **Four hours.**

Routine activities; school marks and marking systems; pupil classification and promotion; importance of food production and preparation from the standpoint of health and economy; some farm problems every teacher should know something about; landscaping school grounds and farm homes; care of simple household furniture and farm machinery and equipment; selection and care of clothing; home care of the sick.

Education 20 Principles of Teaching. **Four hours.**

Meaning of education; meaning and function of the school; meaning and evidences of learning; purposeful activities; selection and organization of subject matter; various types of class procedure; making assignments; standards for judging teaching.



THE TRAINING SCHOOLS

Education 21. Human Development and Psychology. **Four hours.**

Survey of human development and psychology; heredity and early development; environmental factors in development; the human organism as an energy system; interests, attitudes, and values; emotional development; personality and adjustments of the individual; growth and its implications; social relationships and acculturation; intelligence and other aptitudes; the nature of learning; guidance in learning; transfer of training; thinking, reasoning, and creative activity; aesthetic experience; evaluation of learning; records of development and ways of influencing or guiding individuals.

Education 22. Reading in the Elementary School. **Four hours.**

Objectives of reading in the elementary school; reading in the primary and intermediate grades; the place of oral reading in the grades; individual differences; word difficulties; phonics; measuring reading instruction; motivation; materials of instruction.

Education 26. Directed Observation and Student Teaching. **Eight hours.**

Graduated approach to responsible teaching in the elementary school through experiences in study and discussion, directed observation, organizing materials, laboratory work, and gradual participation; experiences in the study of child behavior; the course of study; selection and organization of curriculum experiences; teaching the various school subjects; various types of teaching and learning techniques and devices; experiences in playground and noon-hour supervisions; participation in community activities.

UPPER DIVISION COURSES

(Open only to Junior, Senior, and Graduate Students)

Education 30. The Junior High School. **Two hours.**

Origin, development, and present status of the junior high school movement; the place of the junior high school in the public school system; the aims, purposes, and objectives of the junior high school; evaluation of types of programs; the junior high school plant; library, apparatus, and equipment of the junior high school.

Education 31. Child Development and Psychology. **Four hours.**

Development before birth; the organism as a dynamic system; the organization of behavior; fundamental training and habits in early childhood; physical growth, motor development, and accepting one's self; diseases of children and their psychological implications; the child in the home and family relationships; the child and his school; peer-culture and class-status effects on the behavior of children; language development; emotional development; behavior difficulties and personality patterns; mental development in children; learning and aesthetic experience; interests of children—play, graphic and musical expression, reading, radio, and the movies; techniques of studying child development and of influencing behavior.

Education 32. Pupil Accounting. **Four hours.**

Relation of attendance to pupil progress; social and economic factors which affect attendance; school census; personnel records. In developing these topics a study will be made of personnel work in typical schools of Kentucky.

Education 34. Adolescent Development and Psychology. **Four hours.**

Physical development; mental development; growth of intelligence; adolescent interests; emotional life; learning and forgetting; moral and religious development; adolescent personality; disturbances of personality; hygiene of adolescence; prediction of adolescent behavior; guidance of adolescent behavior.

Education 36. Fundamentals of Secondary School Methods. **Six hours.**

Graduated approach to responsible room teaching through experiences in study and discussion, organizing materials, directed observation, laboratory

work, and gradual participation; development of the American secondary school; experiences in the study of pupil behavior; selection and organization of curriculum experiences; variation in techniques of teaching in different types of learning; learning objectives, interests, methods, and materials in special fields; experiences involving management and co-curricular duties; experiences in human relationship.

Education 37. Resource-Use Education. **Four hours.**

This course is designed to help teachers understand the dynamic role of education in developing resources—natural, human, and cultural—and to aid them in making better use of resources in teaching. Topics: meaning and objectives of resource-use education; analysis of state, regional, and national resources; selecting and organizing resource materials for effective teaching purposes; use of field trips, visual aids, readings, and other activities; sources of materials from state, regional, and national agencies; types of aids available to teachers; state, regional, and national planning for the conservation and wise use of resources; some principles of resource-use education.

Education 39a. Problems of Elementary School Supervision. **Eight hours.**

This course has been designed to provide training for helping teachers in Kentucky. In so far as possible the activities of the course are carried out in a workshop situation. This means that the laboratory approach is utilized in dealing with various problems. The following topics are treated: objectives and problems of helping teachers; problems involved in getting the school organized and under way; problems of learning in relation to child growth and understanding; analyzing children's difficulties and needs and helping teachers to find ways to overcome these difficulties and to meet these needs; teaching the school subjects with particular emphasis on planning instructional programs in these subjects; selection, organization, and evaluation of subject matter and materials; measurement and evaluation of pupil progress involving the use of standard tests, teacher-made tests, records, and other available means; local, state, regional, and national aids and services available to teachers; observation in the Elementary Training School and in the Rural Demonstration School.

Education 39b. Problems of Elementary School Supervision. **Eight hours.**

Continuation of Education 39a.

The following topics are treated: techniques and functions of supervision; analyzing teachers' problems; planning with teacher groups; use of teachers' meetings, schoolroom visitation, demonstrations, conferences, circular letters, field trips, and other supervisory agencies and techniques; ways and means of developing school and community understanding and cooperation; use of community agencies and resources in the school program; ways and means of developing an understanding of professional organizations and of getting teachers to develop professional attitudes; ways and means of developing an understanding of the total school system and of getting teachers to understand their relation to the total school program; how public schools are organized, financed, and administered; planning county-wide helping teacher programs; observation in the Elementary Training School and in the Rural Demonstration School.

Education 40. Measurement and Evaluation in the Elementary School. **Four hours.**

Growth of measurement and evaluation; types of tests and evaluative procedures; test construction; selecting, giving, scoring, and interpreting tests; tests of intelligence and of special aptitudes; measurement and evaluation in arithmetic, language, spelling, handwriting, the social sciences, art and music, miscellaneous areas, and general achievements; uses of tests and evaluative techniques.

Education 41. Measurement and Evaluation in the Secondary School. **Two hours.**

Growth of measurement and evaluation; types of tests and evaluative procedures; test construction; selecting, giving, scoring, and interpreting tests; tests of intelligence and of special aptitudes; measurement and valuation in language, mathematics, science, social studies, special subjects, general achievement, and personality adjustment; uses of tests and evaluative techniques.

Education 42. Administration and Supervision of the Elementary School. **Four hours.**

Aims and objectives of the elementary school; types of elementary school organization; time allotments; attendance; library service; classification and promotion of pupils; health; publicity; special classes; plant; office management; organization for supervision; the principal and his opportunity for leadership.

Education 43. The Elementary School Curriculum. **Four hours.**

Objectives of education in light of society; function of the school; function of the curriculum; the curriculum as related to the objectives of education and to society; criteria for evaluating curricula; need and procedure for curriculum revision and construction.

Education 43a. Problems of Elementary Education. **Four hours.**

This course has been developed in connection with our work-shop program of recent years. As the title implies, the course stresses the problems of elementary education with particular emphasis upon the improvement of class-room instruction in elementary schools. The work of the course is functional character and either grows out of the actual experiences of teachers in the field or is based on real teaching situations in elementary schools. Special attention is given to reading problems, arithmetic problems, nutrition and health education, civic problems, conservation of natural resources, and general problems of elementary education. Desirable instructional materials and teaching procedures are emphasized.

Education 44. Principles of Secondary Education. **Four hours.**

Growth and background of American secondary school; variability and selection of the pupil; aims and functions of secondary education; relation to elementary and higher education; forms of organization; comparison between European and American secondary schools; the rural school; vocational education; trends and methods of curriculum construction; the secondary school offerings; extracurricular activities; guidance and community relationship; vision of secondary education.

Education 45. High School Administration and Supervision. **Four hours.**

Scope and function of administration; administration of the program of studies; the vocational program; the health program; the extracurriculum; the guidance program; the program for individual differences; schedule of classes; personnel and organization; buildings and grounds; equipment and supplies; office standards; procedures, and forms; the school and the community.

Education 46. Supervised Student Teaching. **Sixteen hours.**

Observation, participation, and responsible room teaching; child study with special case study problems and remedial work; development of skills and techniques desirable for good school procedure; the location, collection, and organization of materials for instruction; study of community occupations, resources, social and economic problems; experience in meeting parents, visiting homes, participation in social programs of school and community; experience in directing various kinds of activities including routine school duties, field trips, and extracurricular program; acquaintance with the school organization, school policies, system of records and the like; learning how to maintain desirable pupil-teacher relationship.

Education 47. Public School Administration and Supervision. **Four hours.**
Function and scope of school administration and supervision; school organization and control; the work of school officials; the board of education and its work; major problems connected with the administration and supervision of public education.

GRADUATE DIVISION COURSES

Education 50a. School Administration I. **Four hours.**
Federal relations to education; the state as a fundamental school unit; general school law and court decisions relating to public education; powers and duties of state school officials; work of the state department of education; local units for school control; powers and duties of local school officials; administration of adult education and other types of special education; the administration of teacher personnel; public-school relations.

Education 50b. School Administration II. **Four hours.**
Administration of pupil accounting; the school census; attendance; records and reports; organization and administration of the supervisory program; curriculum administration; selection of school sites; building plans and designs; school building management; operation and maintenance of the school plant; selection and use of equipment and supplies; organization of school libraries; auxiliary agencies; administration of health education; school consolidation and transportation; office administration.

Education 50c. School Administration III. **Four hours.**
The school finance situation; state and local problems of school finance; sources of public-school revenues; preparation and administration of the budget; cost accounting; financial records and reports; types of fiscal control; school indebtedness; short-term borrowing; school bonds; preparation and administration of the salary schedule; financial aspects of school publicity; educational inequalities; units of school support; apportioning school funds; economies in school administration.

Education 51a. (Formerly Education 51a and 51c.) Curriculum Problems and The Improvement of Instruction in Elementary Schools. **Four hours.**
Meaning and function of education; underlying principles developed for curriculum use and curriculum revision; interpretation of the learning experiences (school subjects in light of the meaning and function of education); study of concrete materials and classroom procedure with a representative range of practical problems in various subject areas; types of organization used in modern instruction; how children learn; various educational agencies in the community; how the school may be made a real community center; laboratory study and field trips.

Education 51b. Rural School Supervision. **Four hours.**
Objectives and problems of rural school supervision; techniques and functions of supervision; current practices in rural supervision; problems of organizing instruction to meet increasing responsibilities of rural schools; analyzing teachers' difficulties; planning supervisory programs; selecting and organizing instructional materials; locating and using community resources and other aids available to rural teachers; techniques for developing desirable professional relations; problems of in-service education for rural teachers. Each member of the group will plan a supervisory program for a local school system in Kentucky as a special project in the course.

Education 52. Human Development and the Psychology of Learning. **Four hours.**
Developmental factors and individual differences; motives, goals, and purposes; arranging the learning situation; problem solving and creative ex-

pressions; acquiring skill and information; transfer; the curriculum; social setting for learning; evaluation of development and learning.

Education 53. Audio-visual Education. **Four hours.**

Meaning and value of audio-visual aids; fundamental principles developed for the selection, organization, and utilization of audio-visual materials; detailed study of various sources of visual aids; formation of standards for evaluation; laboratory study and field trips. Special attention is given to problems of organizing these materials in a school.

Education 54. (Formerly Education 54a and 54b.) Personality Development and Adjustment. **Four hours.**

Foundations of personality; human development and personality; the home and personality; the school and personality; the social order and personality; frustration and aggression; conflicts and other maladjustments; the analysis and personality; improving personality; educational implications of the psychology of personality; a case history illustrating the foregoing topics.

Education 55a. History of Education. **Two hours.**

Brief survey of the history of education in ancient and medieval times with special reference to the contribution of Greece, Rome, and Christianity to modern education; educational influences of the Renaissance and the Protestant Reformation; the role of the doctrine of formal discipline; educational influences of Comenius, Rousseau, Pestalozzi, Froebel, and Herbart.

Education 55b. History of Education in the United States. **Two hours.**

Rise and development of public education in the United States with special emphasis upon the work of Horace Mann; sociological, psychological, and scientific movements in education; desirable educational reorganizations; the influence of John Dewey; brief study of the development of public education in Kentucky.

Education 55c. Philosophy of Education. **Two hours.**

Meaning and scope of philosophy and education; contrasting philosophies and conceptions of education; the nature and meaning of education in relation to the individual and the social order; education and domocracy; social progress and social control; the nature of thinking; educational aims and values; subject matter and methodology in relation to the educative process; character education; evaluation and interpretation of present-day issues and problems in education.

Education 55d. Comparative Education. **Two hours.**

Examination, comparison, and discussion of the background of conditions and theories which have resulted in the present practices in education in the world today with special emphasis upon the school systems and practices in Germany, France, England, Russia, Denmark, Sweden, China, Australia, Canada, Mexico, and representative South American countries. Comparisons will be made between education in America and in foreign countries.

Education 56. Applied Statistical Methods. **Four hours.**

Prerequisite: Mathematics 31.

Measurements in psychology and education; frequency distributions; measures of central tendency; measures of variability; applications of the normal distribution curve; reliability and significance of statistics; testing hypothesis; prediction and errors of prediction; correlation methods; reliability and validity of tests.

Education 57a. (Formerly Education 57.) Educational Sociology. **Four hours.**

Relation of sociology to education; sociological problems and their educational implications; social groups and institutions in relation to education; social forces and their significance in society; the sociological determination of educational objectives; social elements and values in the curriculum; essential elements of a socialized educational program.

Education 57b. Problems in Vocational Education. **Two hours.**

Meaning and need of vocational education; basic principles formulated for the study of vocations and the application of these principles to intelligent selection of a vocation; comprehensive study of the factors determining an intelligent vocational choice including job analysis and analysis of human and economic resources. Emphasis is placed on how vocational education may function in the small as well as the large school system.

Education 58a. High School Administration. **Two hours.**

Secondary school organization; the principal; the staff; the pupils; program of studies; schedules; community relationships; records and reports; articulation; library; plant; finance; other high school problems.

Education 58b. (Formerly Education 58b and 58c.) Improvement of Instruction in the Secondary School. **Four hours.**

Aims of the public secondary schools; plans for evaluating curriculum procedures; qualities of good teaching; procedures of evaluating and improving class-room teaching; methods of making the school a more effective agency.

Education 59a, b, c. Seminar. **One or two hours.**

The Seminar is designed primarily for students who are preparing a thesis in partial fulfillment of the requirements for the degree of Master of Arts in Education.

Education 59d. Research in Education. **Two hours.**

Functions of educational research; types of research and the principal techniques of each type; bibliography; discovering educational problems for study; organization and interpretation of data; preparing and evaluating research reports; class discussions and reading reports.

Required of all graduate students who do not prepare a thesis.

RECOMMENDED CURRICULUM FOR A MAJOR IN ENGLISH

(A. B. Degree with right of teaching certificate)

First Year

1st Quarter	Hrs.	2nd Quarter	Hrs.	3rd Quarter	Hrs.
Eng. 10a	3	Eng. 10b	3	Eng. 10c	3
Hist. 10	4	Hist. 11	4	Eng. 12 or 23	4
Ph. Ed. 10	½	Lib. Sci. 10	1	Ph. Ed. 10	½
Soc. 10	1	Ph. Ed. 10	½	Elect.	9
Elect.	8	Elect.	8		
	16½		16½		16½

Second Year

Eng. 21a	4	Eng. 21c	4	Educ. 21	4
For. Lang.	4	For. Lang.	4	Eng. Elect.	2
Hlth. 26	4	Ph. Ed. 10	½	Hist. 21 or 22	4
Ph. Ed. 10	½	Ph. Ed. 21	2	Ph. Ed. 10	½
Elect.	4	Elect.	6	Elect.	6
	16½		16½		16½

Third Year

Educ. 34	4	Eng. 30b	2	Eng. Elect.	4
Eng. 30a	2	Eng. Elect.	2	Hist. 35 or 37	4
Eng. Elect	4	For. Lang.	4	Elect.	8
For. Lang.	4	Elect.	8		
Elect.	2				
	16		16		16

Fourth Year

Educ. 36	6	Eng. 47	4	Educ. 46	16
Eng. Elect.	4	Soc. 30	4		
Elect.	6	Elect.	8		
	16		16		

Electives must be selected to meet the 40 hour general requirement as outlined in the section on Curricula, Degrees, and Certificates under the subheading The Provisional High School Certificate.

Recommended Curriculum for a Second Major in English

A student with a first major in some other department may take the following courses for a second major in English: 10a, 10b, 10c, 12 or 23, 21a, 21c, 30a, 30b, 47, one course from each group (33, 36, 37a, 37b) (42, 43, 44, 45) (22, 32a, 32b, 34a, 34b, 35a, 35b) (20a, 20b, 27a, 27b, 26, 39, 40). Must have a minimum of 36 hours exclusive of freshman English.

Minor

A student with a major and a minor in other departments may take the following courses for a minor in English: (Literature) 10a, 10b, 10c, 21a, 21c, 30a, one course from each of the following groups (12, 23, 26) (30b, 20a, 20b) (22, 32a, 32b, 34a, 34b, 35a, 35b) (33, 36, 37a, 37b) (42, 43, 44, 45). Must have 24 hours exclusive of freshman English. Or (Speech and Dramatics) 10a, 10b, 10c, 12, 21a, 21b, 23, 25 or 46, 27a, 27b, 31, 32a or 32b, 33.

Recommended Curriculum for a Major in English Without Right of Teaching Certificate

The general education requirements outlined under the heading of Curricula, Degrees, and Certificates must be met. A curriculum will be furnished upon request.

ENGLISH

LOWER DIVISION COURSES

English 10a. Spoken and Written Communication I. **Three hours.**

Practice in organizing and presenting, both in speaking and in writing, material from the student's experience and observation and from his reading and study. Some practice in more effective reading and listening if necessary; review where necessary of the mechanics of expression, such as grammar, spelling, diction, punctuation, and sentence structure.

English 10b. Spoken and Written Communication II. **Three hours.**

Prerequisite: English 10a.

Continued practice in organizing and presenting material as written and spoken composition. Longer compositions; paragraph structure and development; word study; acceptable usage in writing and speaking.

English 10c. Spoken and Written Communication III. **Three hours.**

Prerequisites: English 10a and 10b.

Continued practice as in preceding courses; emphasis on reading and

analysis; at least one longish investigative paper which employs the elementary principles of research; acceptable usage in writing and speaking.

English 12. Fundamentals of Speech. **Four hours.**
Prerequisite: English 10a.
Corrective work for posture and movement; applied science of voice production: characteristics of a pleasing voice; individual diagnosis of voice qualities, tone-placing; enunciation; pronunciation; pitch, rate, and volume; much practice in individual speaking and reading under careful, constructive criticism.

English 20a. Journalism I. **Two hours.**
Prerequisite: English 10a and 10b.
Survey of newspaper content; nature of news; special forms of news; news gathering; news writing; features and human interest stories; mechanics of news printing: news ethics; the school newspaper. (Note: Students taking this course are expected to work on the college newspaper and to attend and "cover" assembly or chapel programs).

English 20b. Journalism II. **Two hours.**
Prerequisite: English 10a and 10b.
The newspaper as an organ of public opinion and an instrument of the general welfare; newspaper history; newspaper policies and trends; freedom and responsibility of the press; purposes and types of editorials; editorial technique; reading and analysis of editorials; editorial writing; press and radio; the informative newspaper and magazine article.

English 21a. Survey of Literature I. **Four hours.**
Prerequisites: English 10a, 10b, and 10c.
Selections from the great masterpieces of Greek and Latin poetry, drama, history, and philosophy; selections from Oriental, Hebrew, and Mohammedan literature; selections from medieval myth, saga, and romance; selections from the continental literature of the Renaissance; selections from modern French, German, and Russian literature; individual reading of some complete masterpieces.

English 21c. Survey of Literature II. **Four hours.**
Prerequisites: English 10a, 10b, and 10c.
Anglo-Saxon poetry; romances of chivalry; ballads; Chaucer; Shakespeare and Elizabethan drama; Renaissance English lyrics; Milton; prose from Bacon to Pepys; prose of the New Classicism; poetry of the New Classicism; the Romantic poets; English prose of the nineteenth century: American essays and addresses: Victorian poets; nineteenth century American poets; the short story; the new English drama.

English 22. The Short Story. **Two hours.**
Prerequisites: English 10a, 10b, 10c, and one course in literature.
Technique of the short story; development of the short story as a literary type; romanticism and realism in stories; the short story in America; short stories for the high school; the writing of a story or of a paper.

English 23. Public Speaking. **Four hours.**
Prerequisites: English 10a, 10b, 10c.
Source and organization of speech materials; objective and audience considerations; practice in preparation and delivery of speeches for various occasions, purposes and audiences; speech criticism; parliamentary procedure with participation drills.

English 24. Literature for Children. **Four hours.**
Prerequisites: English 10a, 10b, 10c.
Brief survey of the history of children's literature and a study of the literature itself under the following topics: Mother Goose, fairy tales, folklore and fables, realistic and fanciful stories, myths, epics and sagas, the romance

cycles, poetry, fiction, biography, historical and geographical literature. Methods of teaching literature in the elementary grades are touched upon.

English 25. Story Telling. **Two hours.**

Prerequisites: English 10a, 10b, 10c and 24.

History of story telling; purpose and aim of story telling; story interests of childhood; preparing the story; telling the story; dramatizing the story; uses of the story in schoolroom subjects; study of a considerable stock of stories of a wide range of appeal; much practice in actual telling of stories to children; constructive analysis of each student's performance.

English 26. Grammar for Teachers. **Three hours.**

Prerequisites: English 10a, 10b, 10c.

Parts of speech, syntax and sentence analysis; history of teaching of grammar; methods of testing and measuring progress.

English 27a. Dramatic Presentation I. **Two hours.**

Prerequisites: English 10a, 10b, 10c.

Art and technique of acting; relation of the individual to the role, to the play, and to the director; value of creative dramatics to the individual and to the group.

English 27b. Dramatic Presentation II. **Two hours.**

Prerequisite: English 27a.

Selection of the play; casting and rehearsing; theory and construction of stage scenery; theory and practice of stage lighting; costuming and make-up; organization of production staff.

UPPER DIVISION COURSES

(Open only to Junior, Senior, and Graduate Students)

English 30a. Advanced Composition I. **Two hours.**

Required of juniors and seniors who have less than eight hours of freshman English.

Required written reports, precis, recommendations; informational essays or feature articles, news stories, editorials; book reviews; critical essays; research articles. Students are encouraged to write with a view to submitting their articles to suitable periodicals for publication.

English 30b. Advanced Composition II. **Two hours.**

Prerequisite: English 30a.

Practice in writing short stories, one-act dramas, radio and motion picture dramas, feature articles, critical essays, familiar essays. Students are encouraged to write with a view to submitting the writing to suitable agencies for publication.

English 31. Discussion and Debate. **Four hours.**

Prerequisites: English 10a, 10b, and 10c.

Logic and semantics; process of persuasion in the formation of public opinion; application of discussion and debate as essential tools for reaching decisions in a democratic society.

English 32a. Shakespeare I. **Two hours.**

Prerequisites: English 10a, 10b, 10c, and two courses in literature.

The England of Shakespeare's time; Elizabethan drama when Shakespeare began writing; Elizabethan theories of comedy; the development of Shakespeare's comic genius; sources of his material; representative comedies, comic-history plays, romantic tragi-comedies.

English 32b. Shakespeare II. **Two hours.**

Prerequisites: English 10a, 10b, 10c, and two courses in literature.

Elizabethan England as a background for Shakespeare's tragedies; theories

of Elizabethan tragedy; sources of Shakespeare's tragedies; the chronicle plays as tragedy; the great tragedies; elements of tragedy in his late plays.

English 33. Modern Drama. **Four hours.**

Prerequisites: English 10a, 10b, 10c, and two courses in literature.

Ibsen and his influence; the free theater and the new drama on the continent! naturalism and expressionism; the independent theater and the dramatic revival in England; the Abbey Theater and the Irish Renaissance; American imitators of the European drama; the little theater movement; Eugene O'Neill and the repertory theater; experimental drama.

English 34a. The Novel I. **Two hours.**

Prerequisites: English 10a, 10b, 10c and at least one course in literature.

Survey of the English novel from its beginning to the close of the nineteenth century; content and literary characteristics of the different types of the English novel; some foreign influences; reading and criticism of the different types of the novel.

English 34b. The Novel II. **Two hours.**

Prerequisites: English 10a, 10b, 10c and at least one course in literature.

History and development of the novel in the United States from the beginning to 1920 and the English novel to the same year; different types of the American novel; English and continental influences; extensive reading and discussion of the various types of the novel.

English 35a. Contemporary Literature I. **Two hours.**

Prerequisites; English 10a, 10b, 10c and at least one course in literature.

The novel, the short story, and biography of the last ten years and their roots in the immediate past; new names, new influences, and new trends in fiction; proper emphasis upon literature of escape, of self-realization, and of social consciousness; evaluation of current fiction and biography; advantages and limitations of book reviews and commercial organizations designed to assist in the selection of new books; extensive rather than intensive reading (not confined to any one nation).

English 35b. Contemporary Literature II. **Two hours.**

Prerequisites: English 10a, 10b, 10c and at least one course in literature.

Same period as preceding course but with emphasis on contemporary poetry and drama; new poets and poetic theories and techniques exemplified in current poetry; new dramatists and current dramatic theories and techniques; stage drama, motion picture drama, and radio drama; extensive rather than intensive reading (not confined to any one nation).

English 36. Literature of the United States. **Four hours.**

Prerequisites: English 10a, 10b, 10c and two courses in literature.

Persistence of pioneer attitudes in American literature; the case for religious, political, personal, and economic freedom; from rugged individualism toward social concern; "woods longing" and the open road; quest for the ideal; inter-racial accommodation and conflict; progress toward realism; man and nature; men and machines; men and earth; literary evaluation; teaching techniques; writers as human beings; topics inherent in selected individual writings from colonial times to the present.

English 37a. Poetry and Prose of the Romantic Period. **Four hours.**

Prerequisite: English 10a, 10b, 10c and two courses in literature.

In poetry the rise, development, and culmination of Romanticism; the impact of German metaphysics; the development of poetic form in Wordsworth and Coleridge; the return to the past in Scott and Southey; revolt and satire in Byron; Shelley and democratic idealism; Keats and esthetics. In prose the development of the essay as a medium of self-expression, literature criticism, and social ideals, as exemplified in the writings of Lamb, Coleridge, Hazlitt, DeQuincey, and Landor.

English 37b. Poetry and Prose of the Victorian Period. **Four hours.**

Prerequisite: English 10a, 10b, 10c and two courses in literature.

Social ideals, political principles, religious conceptions, scientific theories, and cultural changes as mirrowed in the non-fictional prose of such Victorian writers as Macaulay, Carlyle, Newman, Mill, Spencer, Arnold, Huxley, Ruskin, Stevenson, and Pater. The poetic cycle from Tennyson to Housman, reflecting the religious faith and doubt, social reform and unrest, estheticism, and skepticism of the period.

English 38a. Speech Correction. **Two hours.**

Prerequisites: English 10a, 10b, 10c.

Diagnostic and remedial procedures for the correction of speech; phonetics from the point of view of English speech; the phonatory and articulatory aspects of speech development.

English 38b. Speech Correction. **Two hours.**

Prerequisites: English 10a, 10b, 10c.

Diagnostic and remedial procedures for speech disorders; psychogenic disorders associated with the linguistic aspect of speech development.

English 39. Books and the Modern Mind. **Two hours.**

Prerequisites: English 10a, 10b, 10c and at least one course in literature.

Reading and discussion of modern books that have influenced modern thought and action; basic concepts of the physical universe, man, and society as found in such writers as Darwin, Marx, Frazer, and others; social applications in novels and plays; influence upon forms of literature and art; attempts at ethical and religious synthesis.

English 40. Kentucky Literature. **Two hours.**

Prerequisites: English 10a, 10b, 10c and one course in literature.

Economic, political, social, and religious background of the early Kentuckians as expressed in their writings; ante bellum literature; the influence of the War Between the States; the rise of the local color fiction group; the revival of poetry; present-day writers and tendencies; ballads; seventeenth century survivals in the native idiom; opportunity to familiarize students with the John Wilson Townsend Collection.

English 42. Renaissance and Elizabethan Literature. **Four hours.**

Prerequisites: English 10a, 10b, 10c and two courses in literature.

Spirit of the Renaissance; influence of Italian and other continental literatures; early English humanists; Elizabethan enthusiasm; Elizabethan language; new literary influences; chief literary forms; Spenser, Sidney, Bacon, Marlowe, Shakespeare, Ben Jonson; other dramatists and lyrists.

English 43. Milton and the Puritan Period. **Three hours.**

Prerequisites: English 10a, 10b, 10c and two courses in literature.

The Puritan background; life of Milton as it affected his writings; his earlier poetry; development of his genius; the great epic **Paradise Lost** and its interpretation; **Paradise Regained** and **Samson Agonistes**; other writers of the period and their writings.

English 44. Chaucer and Medieval Story. **Three hours.**

Prerequisites: English 10a, 10b, 10c and two courses in literature.

Study of the various types of medieval story—the folk-epic, the beast tale, the metrical romance, the fabliau, the saint's legend, and the ballad—and of the social and moral ideals which they reveal.

English 45. The Age of Classicism. **Four hours.**

Prerequisites: English 10a, 10b, 10c and two courses in literature.

Social backgrounds of classicism; Restoration drama as a reaction against Puritanism; Dryden and the rise of the critical spirit; French and Graeco-Roman influences; the literary dictatorship of Dr. Johnson; the decay of literary patronage; new tendencies in Thomson, Cowper, Gray, Chatterton, Goldsmith, and Crabbe.

English 46. Interpretative Reading. **Four hours.**
Prerequisite: English 12 or the equivalent.
Sources of materials; techniques of interpretation; criteria for selecting readings, for preparing contestants and readers, and for judging contests; individual work under careful direction.

English 47. History of the English Language. **Four hours.**
Prerequisite: Two years of work in English toward a major or minor in English.
The family of languages; the Old English period; the Middle English period; modern English; the foreign and native elements in English; history of English vowel sounds; mutation and gradation; the consonants; English inflections; English accent; collateral readings in the less technical works on the English language.

GRADUATE DIVISION COURSES

English 50. Problems in High School English. **Two hours.**
A seminar for graduate students who wish to work on individual problems under the direction of an instructor.

English 51. Problems in High School English. **Two hours.**
A continuation of English 50.

English 52. English Criticism. **Four hours.**
A study of the development of English literary criticism from its beginning to the end of the eighteenth century. Changing conceptions of the criteria of criticism. Foreign influences in English criticism. The great critics and their works.

FRENCH

A student with a major and a minor in other departments may take a minimum of 24 quarter hours for a minor in French.

LOWER DIVISION COURSES

French 11. Elementary French. **Four hours.**
Pronunciation; grammar; conversation in French on material studied.

French 12. Elementary French. **Four hours.**
Prerequisite: French 11 or one unit of high school French.
Continuation of grammar study begun in French 11 and oral work based on reading material.

French 21. Intermediate French. **Four hours.**
Prerequisites: French 11 and 12 or two units of high school French.
Grammar review; short history of French literature; notable examples of the French short story.

French 22. Intermediate French. **Four hours.**
Prerequisite: French 21 or three units of high school French.
Grammar review; three French novels.

UPPER DIVISION COURSES

(Open only to Junior, Senior and Graduate Students)

French 31. French Prose Classics. **Four hours.**
Prerequisite: Two years of college French or the equivalent.
Intensive reading of a number of French prose classics with emphasis on

the language structure; extensive reading of works by representative prose writers from the Middle Ages to the nineteenth century.

French 32. French Prose Classics. Four hours.
Prerequisite: French 31 or its equivalent.
Selected prose works of the nineteenth and twentieth centuries.

French 41. French Poetry. Four hours.
Prerequisites: Two years of college French or the equivalent.
The Medieval Period; the Renaissance; the Golden Age; Romanticism; the Parnassus School; Symbolism; contemporary tendencies in poetry.

French 42. French Drama. Four hours.
Prerequisite: French 41 or its equivalent.
The classical period; the eighteenth century; Romanticism; modern drama.

RECOMMENDED CURRICULUM FOR A MAJOR IN GEOGRAPHY

(A. B. Degree with right of teaching certificate)

First Year

1st Quarter	Hrs.	2nd Quarter	Hrs.	3rd Quarter	Hrs.
Eng. 10a	3	Eng. 10b	3	Eng. 10c	3
Hist. 10	4	Hist. 11	4	Geog. 10	4
Ph. Ed. 10	½	Lib. Sci. 10	1	Ph. Ed. 10	½
Soc. 10	1	Ph. Ed. 10	½	Elect.	8
Elect.	8	Elect.	8		
	16½		16½		15½

Second Year

Eng. 21a	4	Eng. 21c	4	Educ. 21	4
Geol. 20	4	Geog. 22	4	Geog. 20	4
Ph. Ed. 10	½	Ph. Ed.	½	Geog. 23	2
Soc. Sci. Elect.	4	Elect.	8	Ph. Ed. 10	½
Elect.	4			Ph. Ed. 21	2
				Elect.	4
	16½		16½		16½

Third Year

Geog. 32	4	Educ. 36	6	Geog. 40	4
Hlth. 26	4	Educ. 41 or 34	2 or 4	Elect.	12
Elect.	8	Geog. 33	4		
		Elect.	2 or 4		
	16		16 or 18		16

Fourth Year

Ed. 46	16	Geog. 41	4	Geog. 43 or 44	4
		Geog. 42	2	Elect.	12
		Elect.	10		
			16		16

Electives must be selected to meet the 40 hour general requirement as outlined in the section on Curricula, Degrees, and Certificates under the subheading The Provisional High School Certificate.

Recommended Curriculum for a Second Major in Geography

A student with a first major in some other department may take the following courses for a second major in Geography: 10, 22, 32, 33 or 41 or 43, 40, 20 or 21, Geol. 20, 8 hours elective.

Minor

A student with a major and a minor in other departments may take the following courses for a minor in Geography: 10, 22 or 32, 40, 20 or Geol. 20, 8 hours elective.

Recommended Curriculum for a Major in Geography Without Right of Teaching Certificate

The general education requirements outlined under the heading of Curricula, Degrees, and Certificates must be met. A curriculum will be furnished upon request.

GEOGRAPHY

LOWER DIVISION COURSES

Geography 10. Principles of Geography. **Four hours.** Fee 50c.

The use of maps, globes, tellurians and atlases; the use and interpretation of charts, diagrams and statistics; a brief history of the changing aspects of geography; the nature of human geography; the earth's form and movements, their results and influences upon man; the continents and their influences upon man; human activities in mountains and plains; the influence of the oceans on man; the use of inland waters; man's relation to soil and minerals; man and vegetation in different types of climatic regions; the effects of population density upon standards of living; distribution of the population of the earth.

Geography 20. Climatology. **Four hours.**

Weather and weather observation; elements of climate; climatic regions of the world—a study of climate as affected by the physical factors of sun, mountains, land and water; changes in temperature, pressure, winds—direction and force; humidity; cloud phenomena, precipation, and the major types of storms; forecasting; the climatic regions of the world; weather conditions and their relation to human activities.

Geography 21. Economic Geography of the Industries. **Four hours.**

The more important agricultural products—cereals, starch foods, forage crops, vegetable crops, fruit crops, wine industries, sugar, vegetable oils, condiments and tobacco, vegetable fibers, non-food vegetables; the animal food stuffs, animal fibers, furs, skins; the mining industries; manufacturers—aluminum, automobile, copper, chemical, textile, leather, iron and steel, paint, petroleum, rubber, etc.; trade routes, inland in North America and international trade routes; world trade centers.

Geography 22. Geography of North America. **Four hours.**

Prerequisite: Geography 10.

The United States as a national unit; the geographic regions of the United State as the Upper Lake Region; The Driftless Area, the Atlantic Coastal Plain, the Piedmont, the Interior Highlands, the Puget Sound Trough; the geographic regions of Canada, as the Great Lakes-St. Lawrence Region; the Prairie Plains and Arctic Meadows, the Pacific Mountain Region; Alaska.

Geography 23. World Democracy and Geopolitics. **Two hours.**

Geopolitics; the ideological conflict; backgrounds of nationalism; the global war and strategy; social factors; economic factors; political factors; physical factors; religion and war; educational impacts; cultural factors; health and physical fitness; land and ocean warfare; military factors; diplomacy and war; after war, what?

UPPER DIVISION COURSES

(Open only to Junior, Senior and Graduate Students)

Geography 30. Geography of the South. **Two hours.**

The South, yesterday and today; the advancing South; the physical landscape; the cultural landscape; the major regions; the people of the South; the races and their distribution and problems; transportation facilities; agriculture, its development, its regions, its problems, and possibilities; power resources; mineral wealth, forest resources; manufacturing and industries; comparison of rural and urban communities of the South; the South's future.

Geography 31. Economic and Historical Geology. **Two hours.**

The origin of the earth; genesis of ore deposits; evolution of plants and animals; origin of mountains; history and growth of continents; the earth's interior; formation and recognition of common rocks and minerals; architecture of the earth; geologic time table; the geologic eras; the growth of knowledge of the earth; man's place in nature; geology in the service of man applied to industry and to the larger affairs of men; economic and geologic features of minerals.

Geography 32. Geography of Europe. **Four hours.**

Prerequisite: Geography 10.

The general geographic setting of Europe as a whole; the physiographic climate, economic and political geography of each of the major countries; European trade and commerce; the geographic advantages and handicaps of the various European countries that have resulted from the changes in boundaries that followed the World War I.

Geography 33. Geography of Latin America. **Four hours.**

Prerequisite: Geography 10.

International importance of Latin America; growing interest of the United States in Latin America; historical geography of discovery, settlement and development; Caribbean resources; the Panama Canal; South America in world trade; population distribution; transportation facilities; climatic and physiographic regions; economic geography of the Pampas, the Amazon Basin, Central Mexican Plateau; the Llanos, Andean Highlands.

Geography 40. Geography of World Problems. **Four hours.**

Prerequisite: Six hours of geography.

Geography and the evolution of nations; the expansion of Europe; European influence in world affairs; economic resources; the British Empire and its many problems—India, Egypt, Ireland, South Africa; geography and problems of major nations of the Orient; Islamism; Russia, past and present; Europe in Africa; the problems of the Far East.

Geography 41. Geography of Asia. **Four hours.**

Prerequisite: Geography 10.

The structure of Asia; the geography of Asia; the climates of Asia; the vegetation of Asia; the population of Asia; the exploration and exploitation of Asiatic countries by European nations; Asia's position in the world; the agricultural resources of Asia; summary of the economic resources of Asia; Turkey—the threshold of Asia; Arab Asia; the Iranian Plateau; the Indian Empire; Ceylon; Southeastern Asia; the East Indies; China, the Dead Heart of Asia; Japanese Empire; Asiatic Russia; growing interest in the United States in Asia; the geographic advantages and disadvantages.

Geography 42. Geography and Geology of Kentucky. **Two hours.**

The Kentucky country; geology; surface and drainage; weather and climate; native vegetation; native animals; native people; the coming of the white man; the soil and its conservation; agriculture; animal industries; mineral resources; manufacturing; transportation; location and growth of

cities; Louisville and the cities of the Ohio Basin; other cities; the counties of Kentucky; cultural features of Kentucky—government, education; Kentucky of the future.

Geography 43. Geography of Africa and Australia. **Four hours.**
Prerequisite: Geography 10.
Structure; physiography; climate; vegetation; population; exploration; exploitation; position in world affairs; agricultural resources; transportation facilities; climatic and physiographic regions; foreign trade and foreign interests, comparisons and contrasts with other continents; the geographic advantages and disadvantages; changes resulting from World War and post-war conditions; present-day problems and their geographic background.

Geography 44. Conservation of Natural Resources. **Four hours.**
History of the conservation movement; the forest resources; soil depletion and restoration; the land resources; the fertilizer resources; water origin and supply; water power; irrigation and reclamation; navigation; the mineral resources; the mineral fuels, coal petroleum, natural gas; the metallic resources, iron, copper, lead, gold, zinc, aluminum, silver, uranium and radium; the human resources; agricultural losses.

GEOLOGY

Geology 20. Physical Geography and Geology. **Four hours.** Fee, $1.00.
Materials of the earth; weathering; work of wind; work of ground water; work of streams; work of glaciers; the ocean and its work; the structure of the earth; earthquakes; volcanoes and igneous intrusions; metamorphism; mountains and plateaus; ore deposits; soils, their classification and origin; major physiographic features, their origin and influence on man.

GERMAN

LOWER DIVISION COURSES

German 11. Elementary German. **Four hours.**
Pronunciation; Grammar; conversation in German on material studied.

German 12. Elementary German. **Four hours.**
Prerequisite: German 11 or one unit of high school German.
Continuation of grammar study begun in German 11 and oral work based on reading material.

German 21. Intermediate German. **Four hours.**
Prerequisites: German 11 and 12 or two units of high school German.
Grammar review; short history of German literature; notable examples of the German short story.

German 22. Intermediate German. **Four hours.**
Prerequisite: German 21 or three units of high school German.
Grammar review; three German novels.

GOVERNMENT

LOWER DIVISION COURSES

Government 10. American Government. **Four hours.**
National government: organization of the various departments with their functions and operations, political parties, ideals of correct government, relation of federal to state and local government.

Government 11. American Government. **Four hours.**
State and local government: organization, operation, and problems of state, county and municipal government; relation of state and local to national government.

UPPER DIVISION COURSES

(Open only to Junior, Senior and Graduate Students)

Government 30. English Government. **Two hours.**
Prerequisite: Government 10.
The rise of governmental institutions of England and her influence among the nations; kingship; parliament; cabinet; ministry; privy council; Swiss system of government and her democracy.

Government 40. International Diplomacy. **Four hours.**
Prerequisite: Government 10.
Leading negotiations and treaties among the nations; diplomatic and consular affairs in general.

Government 41. Foreign Government. **Four hours.**
Prerequisite: Government 10.
Main features of the governments of Germany, France, Italy, and Russia.

Government 42. Principles of Democracy. **Two hours.**
The theory of democracy; history of democracy; the attack on democracy; defense of democracy; leading democratic documents; democracy in the present crisis.

RECOMMENDED CURRICULUM FOR A MAJOR IN HEALTH AND PHYSICAL EDUCATION

(B. S. Degree with right of teaching certificate)

First Year

1st Quarter	Hrs.	2nd Quarter	Hrs.	3rd Quarter	Hrs.
Biol. 10	4	Biol. 11	4	Biol. 12	4
Eng. 10a	3	Eng. 10b	3	Eng. 10c	3
Hlth. 10	2	Hist. 11	4	Ph. Ed. 10	½
Hist. 10	4	Lib. Sci. 10	1	Soc. 14	4
Ph. Ed. 10	½	Ph. Ed. 10	½	Elect.	5
Ph. Ed. 11	2	Sci. 10	4		
Soc. 10	1				
	16½		16½		16½

Second Year

Biol. 25	4	Educ. 21	4	Biol. 29	4
Eng. 21a	4	Eng. 21c	4	Ph. Ed. 10	½
Hlth. 20	2	Hlth. 26	4	Ph. Ed. 21	2
Ph. Ed. 10	½	Ph. Ed. 10	½	Ph. Ed. 27 (w)	
Ph. Ed. 25 (w)		Ph. Ed. 20	2	24 (m) or 39 (m)	2
& 30 (w)	4	Elect.	2	Elect.	8
Ph. Ed. 26 (m)	4				
Elect.	2				
	16½		16½		16½

Third Year

Biol. Elect.	4	Educ. 34 or 44	4	Ph. Ed. 34	2
Educ. 36	6	Hlth. 32	2	Elect.	14
Ph. Ed. Elect.(w)	2	Ph. Ed. 36	2		
Ph. Ed. 38(w)	2	Ph. Ed. 37(m)	2		
Elect.	2	Elect.	6		
	16		16		16

Fourth Year

Ph. Ed. 42(m) 2	Ph. Ed. 40 2	Educ. 46 16
Elect. 14	Ph. Ed. 46 4	
	Elect. 10	
16	16	

Electives must be selected to meet the 40 hour general requirement as outlined in the section on Curricula, Degrees, and Certificates under the subheading The Provisional High School Certificate.

Recommended Curriculum for a Second Major in Health and Physical Education

A student with a first major in some other department may take the following courses for a second major in Health and Physical Education: Health 10, 20, 26, 32, Ph. Ed. 10 (six quarters) 11, 20, 21, 34, 36, 40, 46. Additional courses for men: Ph. Ed. 24 or 39, 26, 37, 42. Additional courses for women: 25, 27, 30, 38, 2 hours elective.

Minor

A student with a major and a minor in other departments may take the following courses for a minor in Health and Physical Education: Health 10, 20, 26, Ph. Ed. 10 (six quarters), 11, 20, 21, 34. Additional courses for men: 26, 37, 42. Additional courses for women: 25, 27, 30, 38.

Recommended Curriculum for a Major in Health and Physical Education Without Right of Teaching Certificate

The general education requirements outlined under the heading of Curricula, Degrees, and Certificates must be met. A curriculum will be furnished upon request.

HEALTH

LOWER DIVISION COURSES

Health 10. Personal Hygiene. **Two hours.**

Correct living habits; desirable health practices; the place of health in modern times; scientific versus unscientific and irrational health practices.

Health 20. First Aid to the Sick or Injured. **Two hours.** Fee, 50c.

Meeting emergencies in the schoolroom, on the playground, on the athletic field, and in everyday life. The Standard and Advanced Red Cross Certificates are awarded to students completing the course.

Health 21. General Bacteriology. **Four hours.** Fee, $1.00.

Prerequisites: Chemistry 11 and 12.

Stains and staining techniques; sterilization; preparation of culture media; isolation and identification of bacteria; bacterial control; physical and chemical agents; immunity; disease control.

Health 22. Home Nursing. **Two hours.**

First aid and care of sickness in the home.

Health 26. Public Hygiene and Safety. **Four hours.**

Public hygiene and disease prevention; home, school, and community sanitation and public health.

UPPER DIVISION COURSES

(Open only to Junior, Senior and Graduate Students).

Health 31. Applied Bacteriology. **Four hours. Fee, $1.00.**

Water analysis; food spoilage; fermentation; food poisoning; pathogenic bacteria; vaccination; animal inoculations; livestock diseases.

Health 32. Individual Gymnastics. **Two hours.**

Treatment of faulty body mechanics; diognosis and exercises for deformities of the human body such as weak feet, heart diturbances, paralysis, and bone and joint abnormalities.

Health 36. Materials and Methods for Teaching Health Education. **Four hours.**

General objectives of the health program; health set-ups and practices; selection, organization, and use of health materials for primary and intermediate grades; methods of teaching health.

RECOMMENDED CURRICULUM FOR A MAJOR IN THE AREA OF SOCIAL SCIENCE

(A. B. Degree with right of teaching certificate)

First Year

1st Quarter	Hrs.	2nd Quarter	Hrs.	3rd Quarter	Hrs.
Eng. 10a	3	Eng. 10b	3	Eng. 10c	3
Hist. 10	4	Hist. 11	4	Geog. 10	4
Ph. Ed. 10	½	Lib. Sci. 10	1	Soc. Sci. Elect.	4
Soc. 10	1	Ph. Ed. 10	½	Ph. Ed. 10	½
Elect.	8	Elect.	8	Elect.	5
	16½		16½		16½

Second Year

Eng. 21a	4	Eng. 21c	4	Educ. 21	4
Geol. 20	4	Govt. 10	4	Govt. 11	4
Hist. 21	4	Hist. 22	4	Ph. Ed. 10	½
Ph. Ed. 10	½	Ph. Ed. 10	½	Ph. Ed. 21	2
Elect.	4	Elect.	4	Elect.	6
	16½		16½		16½

Third Year

Com. 28	4	Com. 29	4	Educ. 36	6
Educ. 34 or 44	4	Geog. 22 or 32	4	Hlth. 26	4
Hist. 30	4	Hist. 31	4	Soc. Sci. Elect.	4
Elect.	4	Elect.	4	Elect.	2
	16		16		16

Fourth Year

Educ. 46	16	Soc. 30	4	Geog. 40	4
		Elect.	12	Soc. 31	4
				Elect.	8
	16		16		16

Electives must be selected to meet the 40 hour general requirement as outlined in the section on Curricula, Degrees, and Certificates under the subheading The Provisional High School Certificate.

Recommended Curriculum for a Major in Social Science Without Right of Teaching Certificate

The general education requirements outlined under the heading of Curricula, Degrees, and Certificates must be met. A curriculum will be furnished upon request.

RECOMMENDED CURRICULUM FOR A MAJOR IN HISTORY

(A. B. Degree with right of teaching certificate)

First Year

1st Quarter	Hrs.	2nd Quarter	Hrs.	3rd Quarter	Hrs.
Eng. 10a	3	Eng. 10b	3	Eng. 10c	3
Hist. 10	4	Hist. 11	4	Gov. 10 or 11	4
Ph. Ed. 10	½	Lib. Sci. 10	1	Ph. Ed. 10	½
Soc. 10	1	Ph. Ed. 10	½	Elect.	9
Elect.	8	Elect.	8		
	16½		16½		16½

Second Year

Eng. 21a	4	Eng. 21c	4	Educ. 21	4
Hist. 21	4	Hist. 22	4	Ph. Ed. 10	½
Hlth. 26	4	Ph. Ed. 10	½	Elect.	12
Ph. Ed. 10	½	Ph. Ed. 21	2		
Elect.	4	Elect.	6		
	16½		16½		16½

Third Year

Educ. 36	6	Educ. 34 or 44	4	Elect.	16
Hist. 30	4	Hist. 31	4		
Elect.	6	Elect.	8		
	16		16		

Fourth Year

Soc. Sci. Elect.	4	Soc. Sci. Elect.	4	Educ. 46	16
Elect.	12	Elect.	12		
	16		16		

Electives must be selected to meet the 40 hour general requirement as outlined in the section on Curricula, Degrees, and Certificates under the subheading The Provisional High School Certificate.

Recommended Curriculum for a Second Major in History

A student with a first major in some other department may take the following courses for a second major in History: 10, 11, 21, 22, 30, 31, Gov. 10 or 11, 8 hours elective.

Minor

A student with a major and a minor in other departments may take the following courses for a minor in History: 10, 11, 21, 22, 8 hours elective.

Recommended Curriculum for a Major in History Without Right of Teaching Certificate

The general education requirements outlined under the heading of Curricula, Degrees, and Certificates must be met. A curriculum will be furnished upon request.

HISTORY

LOWER DIVISION COURSES

History 10. History of Western Civilization. **Four hours.**

Rise of ancient governments; the city state of Greece; Grecian art and architecture; the rise of imperial governmnt in Rome; the influence of the Roman legal system; the rise of the Church; medieval institutional and cultural developments.

History 11. History of Western Civilization. **Four hours.**

Rise of modern states; the Renaissance and Reformation; dynastic and international wars; the rise of labor-capital disputes; the rise and development of the socialist party; the World War and its aftermath.

History 21. American History 1492 to 1860. **Four hours.**

Discovery, exploration and conquest by nations; colonization; the colonial wars; alienation of the colonies from England and eventual revolution; establishment of government and rise of a powerful nation; the War of 1812; the new nationalism; westward movement; Jacksonian democracy; the slavery controversy; Civil war and reconstruction.

History 22. American History 1860 to the present. **Four hours.**

The rise of Industrialism; problems of the American farmer; social and cultural advance; money and the tariff; the last American frontier; America as a world power; the World Wars; politics since 1876; recent social developments.

History 25. Local History Appreciation. **Two hours.**

Prerequisite: One course in American History.

Local history, its significance in state and national development; local records, county, city, school, church, business, family; county and other local histories; biographies and genealogies; diaries, journals, letters, etc.; local leaders; sources for writing local history; local historical surveys; excursions to historic buildings, ruins, museums, cemeteries.

History 29. A Survey of the Global War. **Two hours.**

Social, economic, and political background of World War II; problems brought about by world conflict; the importance of a lasting peace.

UPPER DIVISION COURSES

(Open only to Junior, Senior, and Graduate Students)

History 30. European History from 1300 to 1789. **Four hours.**

Prerequisites: History 10 and 11.

Renaissance; Reformation; rise of the national state and royal absolutism; decline of manorialism; rise of capitalism and the mercantile system; the British revolutions of the seventeenth century; international rivalries; wars of dynastic and territorial aggrandizement; the age of reason and enlightened despotism.

History 31. European History from 1789 to the Present. **Four hours.**

Prerequisite: History 30.

The French Revolution and Napoleon; intellectual and religious develop-

ments; restoration and reaction following the Congress of Vienna; revolutionary and reform movements; nationalism; imperialism; political, social, and economic developments in the major countries between the First and Second World Wars.

History 34. Survey of the Far East. **Four hours.**
This course centers mainly about China and Japan, with the European Nations and America brought in, when their policies lead into the area. Some attention is given also to India, Australia and to Islands of the Pacific.

History 35. English History to the Stuarts. **Four hours.**
The coming of the Anglo-Saxon; advance toward nationality; the Norman invasion; English feudalism; the Hundred Years' War; legal and political development; the Wars of the Roses and the fall of feudalism and rise of Tudor monarchy.

History 36. English History from 1603 to 1714. **Two hours.**
Prerequisite: History 35.
The Divine Right of James I and Charles I; religious and financial struggles of the time; parliamentary resistance to the first two Stuarts; the "Roundheaded Rebellion"; Charles II; James II and the English Revolution.

History 37. English History from 1714 to the Present. **Four hours.**
Prerequisite: History 35.
The Hanoverian dynasty; the struggle for empire; development of British Imperialism; parliamentary reforms of the nineteenth century; influence of political parties; England's place in the "Parliament of Men."

History 38. Inter-Racial Relations. **Four hours.**
Local, national, and international problems brought about by inter-racial relations.

History 39. Teaching the Social Studies. **Two hours.**
Aims and objectives; national committee reports; social studies literature; methods of instruction; practical tools of instruction; integration; grade placement; community resources; evaluation.

History 40. Recent and Current World History. **Two hours.**
Prerequisite: History 31.
The First World War and its consequences; the League of Nations and the International Court of Justice; causes of the Second World War; present conditions.

History 41. Modern Germany from 1789 to the Present. **Two hours.**
Prerequisite: History 31.
Political, social, economic, and intellectual developments; effects of the French Revolution and the Napoleonic Wars; revolutionary movements after the Congress of Vienna; formation of the German Empire; domestic and international developments from 1870 to 1914; the World War; the German Republic and the Hitler Revolution.

History 42. The French Revolution and Napoleon. **Two hours.**
Prerequisite: History 31.
A survey of the Old Regime with emphasis on the causes of the Revolution; a detailed study of the Revolution and the Napoleonic Empire.

History 43. History of France Since 1815. **Two hours.**
Prerequisite: History 31.
The Industrial Revolution and its impact on social and political life; religious, intellectual, and cultural trends; reactionary policies of the Restoration period; the Revolutions of 1830 and 1848; domestic affairs under the Second French Empire and the Third French Republic; French nationalism and imperialism in relation to Franco-German rivalry; factors in the decline of France in recent years.

History 44. History of the American West. **Four hours.**
Prerequisites: History 21 and 22.
Significance of the West in American History; advancement of the frontier; influence of the West on politics; Indian problems; the West of the fur trader; the rancher, the miner, and the farmer; communication and transportation; the end of the frontier.

History 45a. History of the Old South. **Two hours.**
Prerequisites: History 21 and 22.
Settlement; peoples; religion; government; education; social and economic conditions; relations with the North and with foreign nations consequent to safety; the Civil War.

History 45b. History of the New South since the Civil War. **Two hours.**
Prerequisites: History 21 and 22.
Reconstruction, resumption, and progress in all lines.

History 46. Kentucky History. **Four hours.**
General, social, economic, and political history of Kentucky; her influence in the development of American democracy; her periods of leadership in the nation; her educational system; Kentucky's great men and women; historical sources of Kentucky.

History 47. Recent and Current American History. **Two hours.**
Prerequisites: History 21 and 22.
The onrush of "Big Business"; commerce; expansion; tariff; foreign relations; imperialism; World Wars and current politics.

History 48. Latin American History. **Four hours.**
A survey of the history of the nations to the south of us, covering the period from Columbus to the present; Latin American culture, economics, politics, and world interest, with special emphasis on our relations with these countries.

CURRICULUM FOR A MAJOR IN VOCATIONAL HOME ECONOMICS

(B. S. Degree with right of teaching certificate)

First Year

1st Quarter	Hrs.	2nd Quarter	Hrs.	3rd Quarter	Hrs.
Biol. 10	4	Art 10	4	Educ. 21	4
Eng. 10a	3	Eng. 10b	3	Eng. 10c	3
H. E. 10	2	H. E. 21b	4	Hlth. 26	4
H. E. 11	2	Lib. Sci. 10	1	H. E. 20	5
H. E. 21a	4	Ph. Ed. 10	½	Ph. Ed. 10	½
Ph. Ed. 10	½	Phys. 10	4		
Soc. 10	1				
	16½		16½		16½

Second Year

Chem. 11	4	Biol. 29h	4	Chem. 13	4
Eng. 21a or 12 or 23	4	Chem. 12	4	Com. 26	4
H. E. 12	2	Eng. 21c	4	Hlth. 22	2
H. E. 25	4	H. E. 24	4	H. E. 23	4
H. E. 26	2	Ph. Ed. 10	½	Ph. Ed. 10	½
Ph. Ed. 10	½			Ph. Ed. 21	2
	16½		16½		16½

Third Year

Chem. 20 4	Educ. 34 4	Educ. 36 6
Hlth. 21 4	H. E. 34 4	H. E. 33 2
H. E. 32 2	H. E. Elect. (Foods) 4	H. E. 35 4
H. E. 38 4	Soc. 30 4	H. E. 36 4
Ind. Arts 32 2		
16	16	16

Fourth Year

H. E. 40 4	H. E. 37 2	Educ. 46 16
H. E. 41 4	H. E. 43 6	
H. E. 42 4	H. E. Elect. 6	
H. E. 46 4	Elect. 2	
16	16	

Minor

A student with a major and a minor in other departments may take the following courses for a minor in Home Economics: Foods, 8 hours; Clothing, 8 hours; House, 4 hours; Family and Child Development, 4 hours.

HOME ECONOMICS

LOWER DIVISION COURSES

Home Economics 10. Textiles. **Two hours.**

Physical and chemical characteristics of the various textile fibers; the weaves, finishes, durability and care of fabrics; application of scientific information to the purchase and use of fabrics.

Home Economics 11. Source, Selection and Cost of Foods. **Two hours.**

Problems involved in the marketing of foods and in the purchase of foods; the foods available for home use; the brands of foods; the amounts of foods for family groups.

Home Economics 12. Costume Design. **Two hours.**

Principles of design as related to the costume; study of line, color, and texture in fabrics as related to different types of individuals.

Home Economics 20. Garment Making. **Five hours.**

Fundamentals of garment construction by means of planning, selecting, and purchasing of fabrics; commercial patterns; construction of simple garments; hand and machine sewing.

Home Economics 21a. Nutrition and Food Preparation. **Four hours.** Fee, **$1.50.**

Composition of foods; the nutritive value of foods; diet in relation to health; the fundamental principles involved in the preparation of foods.

Home Economics 21b. Nutrition and Food Preparation. **Four hours.** Fee, $1.50.

Continuation of Home Economics 21a with emphasis on planning, preparing, and serving "Three Meals A Day."

Home Economics 22. Meal Planning, Preparation, and Serving. **Four hours.** Fee, $5.00.

Prerequisite: Home Economics 21a or its equivalent.

The equipment and arrangement of different types of kitchens; the preparation of balanced meals; the cost of meals; table service; etiquette; hospitality; and special entertainments.

Home Economics 23. Dressmaking. **Four hours.**
Prerequisite: Home Economics 20 or its equivalent.
Construction of four dresses; one wool, one silk or rayon, one made-over problem; fittings and finishes.

Home Economics 24. Interior Decoration. **Four hours.**
Prerequisite: Art 10.
Decoration and furnishing for the interior of the house considering the style of architecture, cost, durability and use of the house; laboratory work on slip covers, curtains, and refinishing furniture.

Home Economics 25. The House. **Four hours.**
Architecture; house plans; landscaping; materials suitable for building a home; financing a home.

Home Economics 26. Food Preservation. **Two hours.**
Planning a food preservation budget; laboratory experience in drying, salting, pickling, freezing, canning, making preserves and jellies; experience with canning in community canneries.

UPPER DIVISION COURSES

(Open only to Junior, Senior, and Graduate Students)

Home Economics 30. Household Equipment. **Two hours.**
Standards for judging household equipment; advantages of labor-saving devices; care of equipment.

Home Economics 31. Advanced Cookery. **Four hours.** Fee, $3.00.
Prerequisite: Home Economics 21a.
Scientific principles of cookery through experimentation and variation of proportions in recipes; skills and techniques of cookery.

Home Economics 32. The Family. **Two hours.**
Biological, psychological, social and economic aspects of family organization.

Home Economics 33. Introduction to Home Management. **Two hours.**
Prerequisites: Home Economics 11, 21a, and 21b.
Economic and scientific factors which influence home living; time, labor, finance, sanitation, and household servant problems.

Home Economics 34. Tailoring. **Four hours.**
Prerequisites: Home Economics 20 and 23.
Experience in handling of woolen fabrics; principles involved in tailoring a coat and a suit.

Home Economics 35. Advanced Nutrition. **Four hours.**
Prerequisite: Chemistry 20.
Food nutrients and functions in the body.

Home Economics 36. Vocational Home Economics Education. **Four hours.**
Prerequisites: Education 21, 34, and 36.
The home economics teacher in the community; the needs of high school girls and the community; the planning of units of study and how to teach these through study of various teaching techniques.

Home Economics 37. Advanced Textiles. **Two hours.**
Prerequisite: Home Economics 10.
The advanced study of textile fibers; chemical tests.

Home Economics 38. Consumer Problems. **Four hours.**
Consumer problems today; guides to buying and standardization of household goods.

Home Economics 40. Dietetics. **Four hours.**
Prerequisites: Home Economics 21a, 21b and 35, Chemistry 20, Biology 29h or registration in it.

Nutritive value of common foods; essentials of adequate diet; human nutrition applied to feeding individuals under various physiological, economic and social conditions.

Home Economics 41. Child Development. **Four hours.**

Prerequisites: Education 21 and 34.

Care necessary for physical, mental, emotional, and social development of the child from infancy through adolescence; observation of children.

Home Economics 42. Advanced Costume and Design. **Four hours.**

Prerequisites: Home Economics 12 and Art 10.

The application of art principles in color and line, in designing and construction of garments.

Home Economics 43. Home Management. **Six hours.**

Prerequisite: Home Economics 33.

Reservations for appointment to live in the Home Management House should be made several weeks prior to the beginning of the quarter.

Improvement of skills in the management of time, money, and energy; meal planning; food buying; preparation and serving of meals; cleaning; and laundry. Family relationship, etiquette and hospitality are emphasized.

Home Economics 44. Institutional Management. **Six hours.**

Organization, managament and equipment of institutions such as tea rooms, cafeterias, and hotel dining rooms; trips to visit large eating places, hotels, and school cafeterias.

Home Economics 46. Advanced Methods. **Four hours.**

Prerequisite: Education 36 or may be taken concurrently.

The student has an opportunity to prepare some teaching materials, visit other schools, become familiar with part-time and adult programs, lunchrooms, keeping of records, clubs, and assembly programs.

RECOMMENDED CURRICULUM FOR A MAJOR IN THE AREA OF INDUSTRIAL ARTS

(B. S. Degree with right of teaching certificate)

First Year

1st Quarter	Hrs.	2nd Quarter	Hrs.	3rd Quarter	Hrs.
Eng. 10a	3	Eng. 10b	3	Art 10	4
Hist. 10	4	Hist. 11	4	Eng. 10c	3
Ind. Arts 10	4	Ind. Arts 11	4	Ind. Arts 26	4
Math. 10	4	Ind. Arts 13	4	Math. 12	4
Ph. Ed. 10	½	Lib. Sci. 10	1	Ph. Ed. 10	½
Soc. 10	1	Ph. Ed. 10	½	Ph. Ed. 21	2
	16½		16½		17½

Second Year

Chem. 11 or Phys. 11	4	Chem. 12 or Phys. 12	4	Chem. 13 or Phys. 20	4
Eng. 21a	4	Eng. 21c	4	Educ. 21	4
Hlth. 20	2	Hlth. 26	4	Ind. Arts 34	4
Ind. Arts 15	2	Ind. Arts 21	4	Ph. Ed. 10	½
Ind. Arts 20	4	Ph. Ed. 10	½	Elect.	4
Ph. Ed. 10	½				
	16½		16½		16½

Third Year

Art 26	4	Art. Elect.	2	Art Elect.	2
Ind. Arts 31	4	Educ. 34 or 44	4	Educ. 36	6
Ind. Arts 44	4	Ind. Arts 36	2	Ind. Arts Elect.	8
Elect.	4	Ind. Arts 37	4		
		Ind. Arts Elect.	4		
	16		16		16

Fourth Year

Art. Elect. 2	Educ. 46 16	Ind. Arts Elect. 6
Ind. Arts 46 2		Elect. 10
Ind. Arts Elect. 8		
Elect. 4		
16		16

RECOMMENDED CURRICULUM FOR A MAJOR IN INDUSTRIAL ARTS

(B. S. Degree with right of teaching certificate)

First Year

1st Quarter	Hrs.	2nd Quarter	Hrs.	3rd Quarter	Hrs.
Eng. 10a	3	Eng. 10b	3	Art 10	4
Ind. Arts 10	4	Ind. Arts 13	4	Eng. 10c	3
Ind. Arts 11	4	Lib. Sci. 10	1	Ind. Arts 26	4
Ph. Ed. 10	½	Math. 10	4	Math. 12	4
Elect.	6	Ph. Ed. 10	½	Ph. Ed. 10	½
		Elect.	4		
	17½		16½		15½

Second Year

Chem. 11 or Phys. 11 4	Chem. 12 or Phys. 12 4	Chem. 13 or Phys. 20 4
Eng. 21a 4	Eng. 21c 4	Educ. 21 4
Ind. Arts 15 2	Hlth. 26 4	Ind. Arts 34 4
Ind. Arts 20 4	Ind. Arts 21 4	Ph. Ed. 10 ..... ½
Ph. Ed. 10 ..... ½	Ph. Ed. 10 ..... ½	Elect. 4
Elect. 2		
16½	16½	16½

Third Year

Art Elect. 4	Art Elect. 2	Art Elect. 2
Hist. 21 4	Edu. 34 or 44 4	Educ. 36 6
Ph. Ed. 21 2	Hist. 22 4	Ind. Arts Elect. 4
Elect. 6	Ind. Arts 36 2	Elect. 4
	Elect. 4	
16	16	16

Fourth Year

Ind. Arts 46 2	Educ. 46 16	Ind. Arts Elect. 4
Ind. Arts Elect. 2		Elect. 12
Elect. 12		
16		16

Electives must be selected to meet the 40 hour general requirements and the requirement for a second major or for two minors as outlined in the section on Curricula, Degrees, and Certificate under the sub-heading entitled The Provisional High School Certificate.

Recommended Curriculum for a Second Major in Industrial Arts

A student with a first major in some other department may take the following courses for a second major in Industrial Arts: 10, 11, 13, 15, 21, 23, 26, 34, 36, 46, 2 hours elective.

Minor

A student with a major and a minor in other departments may take the following courses for a minor in Industrial Arts: 10, 11, 13, 26, 8 hours elective.

INDUSTRIAL ARTS

LOWER DIVISION COURSES

Industrial Arts 10. General Shop. **Four hours.** Fee, $1.00.

Introductory course involving basic units in drawing, wood-working, metal-working, finishing, and electricity; projects and exercises in each activity.

Industrial Arts 11. Elementary Cabinet Construction. **Four hours.** Fee, $1.00.

Basic woodworking course including instruction in common hand tools, elementary wood turning, finishing, characteristics of common cabinet woods, and processing of lumber for industrial use.

Industrial Arts 13. Elementary Mechanical Drawing. **Four hours.** Fee, $1.00.

Lettering; drafting room conventions; inking; tracing; blueprinting.

Industrial Arts 14. Wood Finishing and Decoration. **Two hours.** Fee, $1.00.

Prerequisite: Industrial Arts 11.

Preparation of surface for finishing, staining, sealing, and filling; use of varnish, shellac, and lacquer; finishing abrasives and rubbing; refinishing of furniture.

Industrial Arts 15. Elementary Industrial Arts Design. **Two hours.** Fee, $1.00.

Prerequisite: Industrial Arts 13.

Fundamental principles of constructive, decorative, and pictorial art; practical application of art principles; designing and rendering with pencil, pen and ink, and color.

Industrial Arts 16. Primary Handicraft. **Two hours.** Fee, $1.00.

Typical forms of industrial arts applicable to conditions in the elementary school.

Industrial Arts 20. Elementary Machine Drawing. **Four hours.** Fee, $1.00.

Prerequisite: Industrial Arts 13.

Assembly drawings in accordance with standard drafting room conventions; principal forms of bolts, threads, nuts, and conventions; problems from perspective with dimensions, tabular data, and sketches made from actual parts.

Industrial Arts 21. Intermediate Cabinet Construction. **Four hours.** Fee, $1.00.

Prerequisite: Industrial Arts 11.

Advanced hand woodworking units; operation of common woodworking machines; care and sharpening of tools; related information; construction and finishing of furniture projects.

Industrial Arts 22. Advanced Industrial Arts Design. **Two hours.** Fee, $1.00.

Prerequisite: Industrial Arts 15.

Application of the fundamentals of design through production of plans, furniture rods, and designs representative of the various industrial arts activities.

Industrial Arts 23. Advanced Mechanical Drawing. **Four hours.** Fee, $1.00.

Prerequisite: Industrial Arts 13.

Special emphasis on technique; drawings correlated with shopwork.

Industrial Arts 24. Elementary Pattern Making. **Two hours.** Fee, $1.00

Use of woodworking tools and machines common to pattern making; construction of patterns involving principles of shrinkage, draft, finish, warp, cores; the use of patterns in the foundry.

Industrial Arts 25. Sheet Metal Work. **Four hours.** Fee, $1.00.

Care and use of the common sheet metal tools and machines; making of layouts; templates; projects involving soldering, seaming, punching, riveting, forming, and spot welding.

Industrial Arts 26. General Metalworking. **Four hours.** Fee, $1.00.

Operation and information units in bench metal, machine shop, sheet metal, art metal, foundry, forging, and welding.

Industrial Arts 27. Arc and Oxyacetylene Welding. **Two hours.** Fee, $1.00.

Practice in basic welding processes; horizontal, incline, and overhead welding; characteristics of metals.

Industrial Arts 28. House Planning. **Two hours.** Fee, $1.00.

Planning a residence with floor plans, elevations, details, and specifications; orders of architecture; common styles of homes; building materials.

Industrial Arts 29. Elementary Crafts. **Four hours.** Fee, $1.00.

Instruction and practice in jewelry making, wood carving, and the working of plastics.

UPPER DIVISION COURSES

(Open only to Junior, Senior, and Graduate Students)

Industrial Arts 30. Shop Planning and Equipment. **Two hours.**

Types of industrial school shops; shop planning; machine and tool specifications; design of shop furniture; selection of supplies.

Industrial Arts 31, Advanced Cabinet Construction. **Four hours.** Fee, $1.00.

Prerequisite: Industrial Arts 11 and 21.

Advanced projects involving skill in the use of machines and hand tools; additional practice in woodworking, reeding, fluting, carving, inlaying, veneering, dovetailing; study of industrial furniture processes.

Industrial Arts 32. Weaving and Upholstering. **Two hours.** Fee, $1.00.

Prerequisite: Industrial Arts 21.

Upholstering plain surfaces and frame structures; upholstering with springs; renovation; caning; split and fiber weaving; materials; tools, and tool processes.

Industrial Arts 33. Wood Turning. **Four hours.** Fee, $1.00.

Prerequisite: Industrial Arts 21.

Common wood turning problems; sharpening of tools; operations in spindle turning, faceplate turning, and chuck turning; finishing and polishing.

Industrial Arts 34. Machine Shop Practice I. **Four hours.** Fee, $1.00.

Prerequisite: Industrial Arts 13 and 26.

Basic bench metal, lathe, shaper, milling machine, and drill press operations; machinists tools; metals; related technical information.

Industrial Arts 35. Art Metal Work. **Four hours.** Fee, $1.00.

Prerequisite: Industrial Arts 18.

Skill in working with non-ferrous metals and mild steel; operations in

laying out, raising, planishing, chasing, etching, forming, spinning, turning, and finishing metals; bending, twisting, drilling, riveting, and welding in ornamental iron; casting projects of non-ferrous metals.

Industrial Arts 36. Organization of Subject Matter in Industrial Arts. **Two hours.**

Organization of subject matter for teaching industrial arts in the junior and senior high schools; objectives of industrial arts; analysis of subject matter; organization of jobs; lesson plans; teaching devices.

Industrial Arts 37. Elementary Architectural Drawing. **Four hours.** Fee, $1.00.

Prerequisite: Industrial Arts 13.

Lettering; elements of architecture; mouldings; shades and shadows; wash-work; rendering; drawing from model or cast; sketching.

Industrial Arts 40. Problems in Industrial Arts. **Two or Four hours.**

A course for seniors and graduate students in which problems of special interest and value to the student will be studied.

Industrial Arts 41. Machine Woodworking. **Two hours.** Fee, $1.00.

Prerequisite: Industrial Arts 21.

Special machine operations; repairing and servicing of power woodworking machinery.

Industrial Arts 44. Machine Shop Practice II. **Four hours.** Fee, $1.00.

Prerequisites: Industrial Arts 13 and 34.

Blue print reading; bench work; machine tool operations; machine methods on tool projects; source, characteristics, and use of common metals.

Industrial Arts 45. Machine Shop Practice III. **Four hours.** Fee, $1.00.

Prerequisites: Industrial Arts 34 or 44.

Experience in layout work, jig setups, shop mathematics and blue print reading; moulding; casting; machining tapers; fits; thread cutting; shaping, milling, and heat treating of different metals. Practice in advanced machine processes and tool making.

Industrial Arts 46. Teaching of Industrial Arts. **Two hours.**

Problems of teaching industrial arts; methods of presentation; instructional aids; shop management; demonstration lessons; grading student achievement.

Industrial Arts 47. Advanced Architectural Drawing. **Four hours.** Fee, $1.00.

Prerequisite: Industrial Arts 37.

Student, with instructors approval, will select a project and make a suitable esquisse and rendu of same.

LATIN

Major—A minimum of 36 quarter hours to be selected.
Minor—A minimum of 24 quarter hours to be selected.

LOWER DIVISION COURSES

Latin 10. Elementary Latin. **Four hours.**

Pronunciation; declension of nouns, adjectives, and pronouns; indicatives; infinitives; simple uses of subjunctive of verbs; acquisition of the fundamental principles of the language; ability to read simple Latin prose dealing with Roman home life, mythology, and Roman history.

Latin 11. Elementary Latin. **Four hours.**

Prerequisite: One unit of high school Latin or Latin 10.

Caesar and a wide range of authors of equal difficulty; vocabulary, inflec-

tion, syntax, and their application to English; collateral reading on Roman history and society; training in the understanding of Latin in the Latin order.

Latin 12. Selections from Cicero and Ovid. **Four hours.**

Prerequisite: Two units of high school Latin or Latin 11.

Selections from the works of Cicero, Ovid, Pliny, and others; continued emphasis on mastery of vocabulary and syntax; emphasis on the relation of Latin to English; comparison of the government of the Roman Republic to that of democracies of the present day.

Latin 13. Selections from Vergil's Aeneid. **Four hours.**

Prerequisite: Two or three units of high school Latin or Latin 12.

Selections from Aeneid of Vergil; study of the Augustan age; study of metrical form and structure of the poem; continued emphasis on Latin inflections and constructions.

Latin 15. Selections from Livy. **Four hours.**

Prerequisite: Three units of high school Latin or the equivalent.

Survey of Roman history from the foundation of Rome to the close of the second Punic War; assigned readings from such historians as Mommsen, Heitland, and others; comparative study of Rome and Carthage; critical study of Livy's style.

Latin 16. Selections from Horace. **Four hours.**

Prerequisite: Three units of high school Latin or the equivalent.

Selected odes, epodes, and satires from Horace; study of the Augustan age from both a literary and political point of view; study of Horace's philosophy; various meters employed by Horace.

Latin 22. The Writing of Latin Prose. **Four hours.**

Prerequisite: Latin 15 or the equivalent.

Selections from the text, "Arnold's Latin Prose"; review of syntax; sight reading.

Latin 23. The Latin Dramatists. **Four hours.**

Prerequisite: Latin 15 or the equivalent.

Dramas of Plautus, Terrence, and Seneca; two plays of Plautus for intensive study; rapid reading of other representative plays.

UPPER DIVISION COURSES

(Open only to Junior, Senior, and Graduate Students)

Latin 30. Literature of the Late Republic. **Four hours.**

Prerequisite: Latin 23 or the equivalent.

Selections from the works of Caesar, Sallust, Nepos, and Cicero with emphasis on Ciceronian prose as a basis of much of the thinking and writing since his day; selections from works of poets of this age with emphasis on the works of Catullus and Lucretius.

Latin 31. Latin Literature of the Early Empire. **Four hours.**

Prerequisite: Latin 23 or the equivalent.

The Oxford University Press text—selections compiled by A. C. B. Brown. The selections form a connected and contemporaneous discussion of politics, education, literature, philosophy, social types, and town and country life.

Latin 32. Satire and Epigram. **Four hours.**

Selected satires of Juvenal; selected epigrams of Martial; development of satire in Latin literature with assignments from Horace; satire in English; epigram as a literary expression.

Latin 41. Latin Prose of the Silver Age. **Four hours.**

Prerequisite: Latin 23 or the equivalent.

Letters of Pliny the Younger; selections from the writings of Tacitus.

Latin 42. Roman Private Life. **Four hours.**
Lectures, discussions, and readings on Roman family, home, marriage, education, clothing, food, amusements, travel, religion, town and country life.

LIBRARY SCIENCE

Library Science 10. Library Orientation. **One hour.**
Discussions of the card catalog; library plans; principles of classification; mechanical make-up of the books; reference books; indexes; bibliographies; printed aids in book sections.

RECOMMENDED CURRICULUM FOR A MAJOR IN MATHEMATICS

(B. S. Degree with right of teaching certificate)

First Year

1st Quarter	Hrs.	2nd Quarter	Hrs.	3rd Quarter	Hrs.
Eng. 10a	3	Eng. 10b	3	Eng. 10c	3
Hist. 10	4	Hist. 11	4	Hlth. 26	4
Math. 10	4	Lib. Sci. 10	1	Math. 12	4
Ph. Ed. 10	½	Math. 11	4	Ph. Ed. 10	½
Soc. 10	1	Ph. Ed. 10	½	Elect.	5
Elect.	4	Elect.	4		
	16½		16½		16½

Second Year

Educ. 21	4	Eng. 21c	4	Math. 23	4
Eng. 21a	4	Math. 22	4	Ph. Ed. 10	½
Math. 21	4	Ph. Ed. 10	½	Ph. Ed. 21	2
Ph. Ed. 10	½	Phys. 21	4	Phys. 22	4
Phys. 20	4	Elect.	4	Elect.	6
	16½		16½		16½

Third Year

Educ. 30	2	Math. Elect.	4	Educ. 36	6
Math. 32	4	Elect.	12	Math. 46	4
Elect.	10			Elect.	6
	16		16		16

Fourth Year

Educ. 46	16	Math. Elect.	4	Elect.	16
		Elect.	12		
			16		

Electives must be selected to meet the 40 hour general requirement as outlined in the section on Curricula, Degrees, and Certificates under the subheading The Provisional High School Certificate.

Recommended Curriculum for a Second Major in Mathematics

A student with a first major in some other department may take the following courses for a second major in Mathematics: 10, 11, 12, 21, 22, 23, 32, two courses from the following: 30, 31, 33, 34, 41, 42, 46.

Minor

A student with a major and a minor in other departments may take the following courses for a minor in Mathematics: 10, 11, 12, 21, 22, 23.

Recommended Curriculum for a Major in Mathematics Without Right of Teaching Certificate

The general education requirements outlined under the heading of Curricula, Degrees, and Certificates must be met. A curriculum will be furnished upon request.

MATHEMATICS AND ASTRONOMY

LOWER DIVISION COURSES

Mathematics 01. Arithmetic. **Two hours.**

This course is only for students showing deficiencies in arithmetic as determined by a preliminary test.

The decimal system of notation; the fundamental operations applied to whole numbers and common fractions; decimal fractions; units of measurement; ratio and proportion; percents; simplified computation.

Mathematics 02. Intermediate Algebra. **Two hours.**

This course is only for students showing deficiencies in algebra as determined by a preliminary test, that would indicate their inability to carry on the work in Mathematics 10.

Signed numbers; fundamental operations; equations and stated problems; factoring; fractions; exponents, roots and radicals; graphical methods; quadratic equations.

Mathematics 10. College Algebra I. **Four hours.**

Review of high school algebra; exponents and radicals; functions and their graphs; equations and their solutions; systems of linear equations and quadratic equations.

Mathematics 11. College Algebra II. **Four hours.**

Prerequisite: Mathematics 10.

Ratio and proportion; systems of equations involving quadratics; progressions; mathematical induction; binomial theorem; theory of equations; permutations; combinations; probability; determinants; partial fractions.

Mathematics 12. Trigonometry. **Four hours.**

Prerequisite: Mathematics 10.

The trigonometric functions; logarithms; right triangle; radian measure; properties of the trigonometric functions; functions of two angles; the oblique triangle; the inverse trigonometric functions.

Mathematics 20. Solid Geometry. **Four hours.**

Fundamental propositions, problems, and exercise of solid geometry.

Mathematics 21. Analytic Geometry. **Four hours.**

Prerequisites: Mathematics 10, 11, and 12.

Graphs and loci; polar coordinates; straight line; circle; conic sections; general equation of the second degree; elements of solid analytic geometry.

Mathematics 22. Differential Calculus I. **Four hours.**

Prerequisite: Mathematics 21.

Variables; functions; differentiation; applications of the derivative; successive differentiation; parametric and polar equations and roots.

Mathematics 23. Differential Calculus II. **Four hours.**

Prerequisite: Mathematics 22.

Differentials; curvature; theorem of mean value and its applications; series; expansions of functions; partial differentiation; integration by elementary forms.

Mathematics 26. Teachers' Arithmetic. **Four hours.**

Aims and objectives of arithmetic; value of problems; assignments; examinations; importance of accuracy and speed; value of drill; games; solutions of problems; methods of teaching arithmetic.

UPPER DIVISION COURSES

(Open only to Junior, Senior, and Graduate Students)

Mathematics 30. General Astronomy. **Four hours.**

Development of astronomy as a science; development of the solar system; astronomical instruments; better known facts of astronomy.

Mathematics 31. Elementary Statistical Methods. **Two hours.**

Methods of collecting data; methods of tabulation of data; uses and purposes of statistical methods; central tendencies; deviations; correlations; graphic methods.

Mathematics 32. Integral Calculus. **Four hours.**

Prerequisite: Mathematics 23.

Integration; constant of integration; definite integral; integration as a process of summation; centroids; fluid pressure; other applications and multiple integrals.

Mathematics 33. Theory of Equations. **Four hours.**

Prerequisite: Mathematics 22 or enrollment in Mathematics 22.

Graphs; complex numbers; cubic equations; quartic equations; determinants and symmetric functions.

Mathematics 34. College Geometry. **Four hours.**

Prerequisite: Mathematics 21.

Geometric constructions; properties of the triangle; transversals; harmonic properties of circles.

Mathematics 40. Mathematical Statistics. **Two hours.**

Prerequisite: Mathematics 32.

Graphs; moments; cumulative frequency; the normal law; correlation; probability and frequency curves.

Mathematics 41. Differential Equations. **Four hours.**

Prerequisite: Mathematics 32.

Differential equations of the first order; applications; singular solutions; linear equations with constant coefficients; miscellaneous methods for solving equations of higher order than the first; integration in series; total differential equations.

Mathematics 42. Advanced Calculus. **Four hours.**

Prerequisite: Mathematics 32.

Indeterminate forms; power series; partial differentiation; implicit functions and applications to geometry.

Mathematics 46. Teaching of High School Mathematics. **Four hours.**

Prerequisite: Sixteen hours of college mathematics or consent of Head of the Department.

Aims of high school mathematics; importance of high school mathematics; history of mathematics; problems of teaching applied to mathematics; methods of teaching algebra, plane and solid geometry, trigonometry, and high school arithmetic, selection of problems; types of examinations and their importance; class instruction as applied to mathematics; importance of assignment and methods of study.

Mathematics 47. The History of Mathematics. **Two hours.**
The development of mathematical symbolism; the development of mathematical concepts; the contribution of mathematics to the development of civilization.

Mathematics 48. Problems in the Teaching of Mathematics. **Two hours.**
The course of study; organization of materials; methods of teaching various topics of algebra and geometry; the selection of textbooks; the construction and selection of tests.

MILITARY SCIENCE AND TACTICS

The primary purpose of the Reserve Officers Training Corps is to strengthen our national defense by providing trained officers who would be available in time of war. The secondary purpose is to give educational training, which through the years, has been found distinctly valuable by college students who have taken the course.

As an essential element of military training, certain details of conduct are stressed, in order that, upon completion of his training, the student may be well disciplined in mind and body. The particular methods employed by the military department are but a means to an end. The basic aim is to cultivate in each student habits of cheerful and unquestioning response to proper authority, loyalty, patriotism, self control, precision and alertness. These qualities, together with professional knowledge and experience in command, develop leadership and personality, both valuable in peace and war.

The Federal Government supports military training (R.O.T.C.) by providing uniforms or their money equivalent; by detailing instructors and maintenance personnel from the Regular Army; by furnishing army equipment; and in the case of advanced students, by monthly money payments determined annually. R.O.T.C. training is given by the college under the regulations and supervision of the War Department. Credit towards graduation is allowed as for other college courses.

R.O.T.C. training contemplates four years of work. The complete course is divided into two parts; the BASIC course and the ADVANCED course, each of six quarters duration. Having enrolled in either course, a student will be required to complete the course, unless he is released by proper authority or leaves school.

To be eligible for enrollment in the R.O.T.C., students must be citizens of the United States and must pass a physical examination. Special recognition for service in the armed forces is given to veterans of World War II. To those students who have had over six months but less than one year of service, credit is given for the first year basic course and the student is eligible for enrollment in the second year basic course. Students having had one year or

more of service, are credited with the entire two year basic course and are eligible for enrollment in the first year advanced course.

Enrollment in either course is voluntary and does not obligate the student for military service or call to duty in any other component of the army. Students who complete the basic course are given certificates of service. Satisfactory completion of the entire R.O.T.C. course and a camp period entitle the student to receive a commission as a Second Lieutenant of the Field Artillery in the Organized Reserve Corps. Thereafter, promotion in rank may be obtained by completing prescribed correspondence courses.

Allowances and Cost.—Students enrolling in the basic course receive no cash allowance but are issued a uniform for their personal wear. A deposit of five (5) dollars is required on these items to cover possible loss or damage, not due to ordinary wear and tear. The deposit is returned to students at the end of the school term or upon return of the articles of uniform.

A student who enrolls in the advanced course receives a daily subsistence allowance (approximately $0.66 per day) for the duration of his enrollment in the course, exclusive of the camp period, amounting to about $360.00. An officers' type uniform, complete with overcoat, two pairs of shoes, shirts and cap, is furnished free of cost to each of these students.

Upon completion of the advanced course the student is required to attend a training camp of six weeks' duration. He receives travel pay from his home to camp and return, at the rate of five cents per mile. He is given free medical attention, fed, clothed, and, in addition, is paid at the rate of fifty (50) dollars per month while there. During the camp, the student puts into practice what he has learned during his instruction in the school R.O.T.C. unit.

LOWER DIVISION COURSES

Military Science 11. Introduction to Military Science. **Two hours.**
Military discipline and the customs of service; leadership; field artillery material; obligations of citizenship; elementary gunnery and organization of the army.

Military Science 11a. Basic Course in Military Band. **Two hours.**

Military Science 12. Fundamentals of Military Training. **Two hours.**
Leadership; service of the piece and military material.

Military Science 12a. Basic Course in Military Band. **Two hours.**
Prerequisite: Military Science 11a.

Military Science 13. Fundamentals of Military Training. **Two hours.**
History and policy; sanitation and first aid; map reading; leadership and field artillery ammunition.

Military Science 13a. Basic Course in Military Band. **Two hours.**
Prerequisite: Military Science 12a.

Military Science 21. Basic Military Fundamentals. **Two hours.**
Prerequisites: Military Science 11, 12, and 13.
Fire control instruments; map and aerial photograph reading; battery communications; leadership; automotive vehicle construction and operation; signal communication; and B. C. Detail.

Military Science 21a. Basic Course in Military Band. **Two hours.**
Prerequisite: Military Science 13a.

Military Science 22. Basic Military Fundamentals. **Two hours.**
Prerequisites: Military Science 11, 12, and 13.
Basic instruction in the work of the battery commander's detail, in leadership, and in automotive vehicle construction and operation; driving.

Military Science 22a. Basic Course in Military Band. **Two hours.**
Prerequisite: Military Science 21a.
Military Science 23. Basic Military Fundamentals. **Two hours.**
Basic instruction in the work of the battery commander's detail, in leadership, and in automotive vehicle construction and operation; driving and instruments.

Military Science 23a. Basic Course in Military Band. **Two hours.**
Prerequisite: Military Science 22a.

UPPER DIVISION COURSES

(Open only to Junior, Senior, and Graduate Students)

Military Science 31. First Year Advanced Course. **Three hours.**
Prerequisites: Military Science 21, 22, and 23.
Leadership; administration; military motor vehicles; defense against chemicals; aerial photograph reading.

Military Science 32. First Year Advanced Course. **Three hours.**
Prerequisites: Military Science 21, 22, and 23.
Military team work; advanced gunnery; motor vehicles; reconnaissance and occupation of position and preparation of fire.

Military Science 33. First Year Advanced Course. **Three hours.**
Prerequisite: Military Science 32.
Military team work; advanced gunnery (preparation of fire); motor vehicles.

Military Science 41. Advanced Work in Military Science. **Three hours.**
Prerequisites: Military Science 31, 32, and 33.
Instruction of basic R.O.T.C. students; military history and policy; the law of military offenses; the articles of war; courts-martial; method of instruction; property procurement and funds.

Military Science 42. Advanced Work in Military Science. **Three hours.**
Prerequisites: Military Science 31, 32, and 33.
Officers in the R.O.T.C.; military tactics; military history and policy; military law and administration.

Military Science 43. Advanced Work in Military Science. **Three hours.**
Prerequisites: Military Science 31, 32, and 33.
Officers in the R.O.T.C.; military tactics; military history and policy; military law and administration; O.R.C. regulations; gunnery.

RECOMMENDED CURRICULUM FOR A MAJOR IN THE AREA OF MUSIC

(A. B. Degree with right of teaching certificate)

First Year

1st Quarter	Hrs.
Eng. 10a	3
Mus. 11a.	2
Mus. 16a	2
Mus. 18	2
Mus. 21, 22, 23 or 24	⅓
Mus. 28a	2
Mus. 29a	2
Ph. Ed. 10	½
Soc. 10	1
Elect.	2
	16 5/6

2nd Quarter	Hrs.
Eng. 10b	3
Lib. Sci. 10	1
Mus. 11b	2
Mus. 16b	2
Mus. 21, 22, 23 or 24	1/3
Mus. 28b	2
Mus. 29b	2
Ph. Ed. 10	½
Elect.	4
	16 5/6

3rd Quarter	Hrs.
Eng. 10c	3
Mus. 11c	2
Mus. 16c	2
Mus. 21, 22, 23 or 24	⅓
Mus. 28c	2
Mus. 29c	2
Ph. Ed. 10	½
Elect.	4
	15 5/6

Second Year

Eng. 21a	4
Hlth. 26	4
Mus. 10a	1
Mus. 12a	2
Mus. 38a	2
Mus. 39a	2
Mus. 21, 22, 23 or 24	2/3
Ph. Ed. 10	½
	16 1/6

Eng. 21c	4
Mus. 10b	1
Mus. 12b	2
Mus. 21, 22, 23 or 24	2/3
Mus. 27	4
Mus. 38b	2
Mus. 39b	2
Ph. Ed. 10	½
	16 1/6

Mus. 10c	1
Mus. 12c	2
Mus. 21, 22, 23 or 24	2/3
Mus. 38c	2
Mus. 39c	2
Ph. Ed. 10	½
Elect.	8
	16 1/6

Third Year

Mus. (Applied Elect.)	2
Mus. 21, 22, 23 or 24	2/3
Mus. 37a	2
Mus. 41a	2
Ph. Ed. 21	2
Elect.	8
	16 2/3

Educ. 21	4
Mus. (Applied Elect.)	2
Mus. 21, 22, 23 or 24	2/3
Mus. 37b	2
Mus. 41b or 42	2
Elect.	6
	16 2/3

Educ. 30 or 41	2
Mus. (Applied Elect.)	2
Mus. 21, 22, 23 or 24	2/3
Mus. 37c	2
Elect.	10
	16 2/3

Fourth Year

Educ. 36	6
Mus. 21, 22, 23 or 24	⅓
Elect.	10
	16 ⅓

Mus. 21, 22, 23 or 24	⅓
Mus. 41b or 42	2
Elect.	14
	16⅓

Educ. 46	16

Electives must be selected to meet the 40 hour general requirement as outlined in the section on Curricula, Degrees, and Certificates under the subheading The Provisional High School Certificate.

Recommended Curriculum for a Second Major in Music

A student with a first major in some other department may take the following courses for a second major in Music: 11a, 11b, 11c, 18, 27, 28a, 28b, 28c, 29a, 29b, 29c, 37a, 37b, 38a, 39a, (2 hours Band, Orchestra, Glee Club), 2 hours applied elective.

Minor

A student with a major and a minor in other departments may take the following courses for a minor in Music: 18, 27, 29a, 29b, 29c, and electives to make 24 quarter hours.

Recommended Curriculum for a Major in Music Without Right of Teaching Certificate

The general education requirements outlined under the heading of Curricula, Degrees, and Certificates must be met. A curriculum will be furnished upon request.

MUSIC

Music Fees

Class Instruction:

Piano, voice, violin, one quarter ..... $ 3.50
Wood wind, brass wind, one quarter 2.50

Individual Instruction:

Piano, voice, violin, organ, violoncello,
Two lessons per week, one quarter 18.00
One lesson per week, one quarter 12.00

Practice room with piano, one hour daily, one quarter 3.50
Use of college owned violin, one quarter 2.00

LOWER DIVISION COURSES

Music 1a, b, c. Piano. Individual Instruction. **No credit.**
See music fees.
Introductory course for the non-musician preparatory to Music 11a.
Major scales; tonic chords; first pieces.
Kohler, Op. 190; Streabbog, Op. 63; Bilbro, Progressive Early Grade Studies; Loeschorn, Op. 65, Bk. I.

Music 2a, b, c. Voice. Individual Instruction. **No credit.**
See music fees.
Introductory course for the non-musician preparatory to Music 12a.

Music 3a, b, c. Violin. Individual Instruction. **No credit.**
See music fees.
An introductory course consisting of such studies, scales, and exercises as will prepare the student to enter Music 13a.

Music 4a, b, c. Violoncello. Individual Instruction. **No credit.**
See music fees.

Music 6a, b, c. Wind Instruments. Individual Instruction. **No credit.**
See music fees.
Introductory course for those who wish to learn to play any of the wood-wind or brass instruments.

Music 7a, b, c. Piano. Class Instruction. **No credit.**
See music fees.
Notation; hand position; simple melodies; folk songs.

Music 8a, b, c. Voice. Class Instruction. **No credit.**
See music fees.

Group instruction; to provide a foundation for correct singing and to prepare the student for more advanced private study.

Music 10a, b, c. String Class. **One hour.**

To provide for the beginner who wishes to learn to play a string instrument an opportunity to study under the stimulus of class instruction; to start the beginner on the road toward sufficient playing and technical ability to teach strings in class and to train the string section of a school orchestra.

The first two quarters and part of the third are devoted to the study of one particular instrument. The third quarter devotes some attention to the string instruments not studied in Music 10a and 10b. Practical arranging for string orchestra is also studied.

Music 11a, b, c. Piano. Individual Instruction. **Two hours.**

See music fees.

Schmitt Preparatory Exercises; all major and minor scales in parallel motion; tonic chords and inversions; Burgmuller, Op. 100; Loeschorn. Op. 65, Book II; Bach-Carroll, Book for Beginners; Clementi, Easy Sonatas, Op. 36.

Music 11d, e, f. Piano. Individual Instruction. **Two hours.**

See music fees.

Schmitt Preparatory Exercises; major and minor scales in parallel and contra motion; tonic chords, and broken chords with inversions; Heller, Op. 47; Duvernoy, Op. 120; Bach, Little Preludes; Clementi and Kuhlau Sonatinas.

Music 11g, h, i. Piano. Individual Instruction. **Two hours.**

See music fees.

Wolff, The Little Pischna; major and minor scales in parallel and contra motion; tonic broken chords and inversions; tonic and diminished seventh arpeggi; Czerny, Op. 299; Heller, Op. 45; Bach, Two Part Inventions; Mozart, easiest Sonatas.

Music 11j, k, l. Piano. Individual Instruction. **Two hours.**

See music fees.

Philipp Exercises Pratiques, or Pichna; major and minor scales in thirds, sixths, and tenths; tonic, dominant, and diminished seventh arpeggi, and inversions; Cramer (Bulow), Sixty Selected Studies; Bach, three part inventions; Sonatas by Mozart and Haydn.

Music 11m, n, o. Piano. Individual Instruction. **Two hours.**

See music fees.

Philipp; Pichna, Exercises Journaliers; scales and arpeggi in faster tempi; Bach, French Studies; Czerny, Op. 740; or Clementi, Gradu ad Parnassum; Beethovan, Sonatas.

Music 12a, b, c. Voice. Individual Instruction. **Two hours.**

See music fees.

Breathing exercises; diction, with emphasis placed on vowel formation; technical exercises to fit the individual need of the student.

Sieber studies; simple sacred and secular songs.

Music 12d, e, f. Voice. Individual Instruction. **Two hours.**

See music fees.

Scales, with emphasis on evenness of scale; Vaccai and Marchesi studies; songs from the English, Italian, and German schools.

Music 12g, h, i. Voice. Individual Instruction. **Two hours.**

See music fees.

Scales, supplemented by other exercises leading to more rapid vocalization; Ponofka studies; art songs, with attention to interpretation and artistic performance.

Music 12j, k, l. Voice. Individual Instruction. **Two hours.**

See music fees.

Advanced technical exercises; selections from the standard operas and oratorios; songs in French, Italian and Classical Leider.

Music 13a, b, c. Violin. Individual Instruction. **Two hours.**
See music fees.

Technical proficiency through the third position; two finger scales in these positions; two octave scales in all major keys; development of the technique of the left hand and of the bow arm; sight reading.

Studies and exercises by Kayser and Wohlfart, Danca, Variations; simple selections.

Orchestra attendance required.

Music 13d, e, f. Violin. Individual Instruction. **Two hours.**
See music fees.

Study of the positions; scales and arpeggi in all major and minor keys, in all positions; chord study, double, triple and quadruple; finger shifting and bowing exercises; one- and two-finger scales preparatory to octaves; broken octaves; sight reading.

Mazas, Opus 36; Kreutzer, Selected Studies; Fiorillo and Parre; miscellaneous pieces; one or more of the simpler concertos and sonatas.

Orchestra attendance required.

Music 13g, h, i. Violin. Individual Instruction. **Two hours.**
See music fees.

Three octave scales; left and right hand pizzicato; varied bowing of the diminished seventh chord; all scales, ascending and descending on one string, with any one, two or three fingers; thirds; fingered harmonics.

Sevick, Opus 8; Fiorillo; Rode; Wilhelmj, School of Thirds; Handel, Six Sonatas; Tartini, Sonato in G. Minor.

Orchestra attendance required.

Music 13j, k, l. Violin. Individual Instruction. **Two hours.**
See music fees.

Scales in thirds and octaves; fingered octaves and tenths; cultivation and development of style and an understanding of the composition being played; sonatas and concertos of preceding years continued for public performance; extensive violin solo and chamber music literature.

The student is required to do ensemble work in string quartette and must be able to play first violin in the college orchestra.

Music 14a, b, c. Violoncello. Individual Instruction. **Two hours.**
See music fees.

Music 14d, e, f. Violoncello. Individual Instruction. **Two hours.**
See music fees.

Music 15a, b, c. Organ. Individual Instruction. **Two hours.**
Prerequisite: Four years of piano study.
See music fees.

Elementary Instruction Book for the Hammond Organ; Clemens, Modern School for the Organ; preparatory studies for manuals alone; trios for manuals and pedals; Easy Arrangements for the Hammond Organ.

Music 15d, e, f. Organ. Individual Instruction. **Two hours.**
See music fees.

Buck, Studies in Pedal Phrasing; Bach, Selected Chorale Preludes; Easier Work of Mendelssohn, Guilmant, and other composers for organ.

Music 15g, h, i. Organ. Individual Instruction. **Two hours.**
See music fees.

Dupre, Seventy-nine Chorales; Bach, Selected Chorale Preludes; Selected Works from Guilmant, Rheinberger, Mendelssohn; Selected Modern Compositions.

Music 15j, k, l. Organ. Individual Instruction. **Two hours.**
See music fees.

Bach, Chorale Preludes, Preludes and Fugues; Mendelssohn, Sonata I or II; Widor, Symphony II or IV, Selected Modern Compositions.

Music 16a. Instrument Class: Woodwind. **Two hours.**
See music fees.
Practical instruction in methods of tone production, tuning, fingering and care of the instruments; group instruction, involving handling and playing of the woodwind instruments of the band and orchestra.

Music 16b. Instrument Class: Brass. **Two hours.**
See music fees.
Practical instruction in methods of tone production, tuning, fingering and care of the instruments; group instruction, involving handling and playing of the brass instruments of the band and orchestra.

Music 16c. Instrument Class: Percussion. **Two hours.**
See music fees.
Practical instruction in the fundamentals of percussion technique; group instruction in the use of the snare drum, tympani and traps; particular emphasis will be placed on the snare drum.

Music 18. Elements of Music. **Two hours.**
Staff notation, notes, rests, clefs, scales (various modes), keys, meter, chromatic tones, intervals, chords, cadences, abbreviations, and other symbols; music terms; elements of form; solmization; music writing and simple dictation.

Music 20. Chorus. **One hour.**
To encourage and foster a knowledge of and a desire to participate in choral singing; to teach part singing; to familiarize students with standard community and folk songs and with the more familiar choral works and simpler modern works for mixed chorus; to acquaint prospective teachers with desirable high school choral material; to illustrate ideals of choral singing and methods of attaining them.

Music 21. Band. **One-third hour.**
(Ordinarily credit is given only upon completion of three quarters' work.)
Admission to membership upon approval of instructor.

Music 22. Orchestra. **One-third hour.**
Admission to membership upon approval of instructor.

Music 23. Girls' Glee Club. **One-third hour.**
Admission to membership upon approval of instructor.

Music 24. Men's Glee Club. **One-third hour.**
Admission to membership upon approval of instructor.

Music 25ab. Public School Music. **Four hours.**
Such knowledge of music theory and of the principles of notation as is needed by the grade teacher; the aims of music in the grades; the child voice; tone quality; the unmusical singer; rhythmic development; use of the pitch pipe; rote songs; use of the phonograph in teaching songs, together with increasing ability in music reading on the part of the student.

Music 27. The Enjoyment of Music. **Four hours.**
The most interesting music from all periods and all styles. Besides the regular library of recorded music, there is available for this course the Carnegie Music Set, including reproducing machine and record library.

Music 28a. Beginning Harmony I. **Two hours.**
Four voice part writing based on primary triads; the dominant seventh melodic passing tones and embellishments; keyboard work consisting of scales, triads, etc.

Music 28b. Beginning Harmony II. **Two hours.**
Prerequisite: Music 28a.
Continuation of first term harmony; use of secondary triads and inversions in major and minor keys; harmonizations with figured bass and given soprano; original composition in simple forms; keyboard work with cadences and elementary harmonization.

Music 28c. Beginning Harmony III. **Two hours.**
Prerequisite: Music 28b.
Secondary chords of the seventh; modulation to nearly related keys; continuation of keyboard and original work.

Music 29a. Beginning Sight Singing and Ear Training I. **Two hours.**
Prerequisite: Music 18.
Sight singing of melodic exercises in major and minor keys and in various rhythms; tone group, and verbal and tonal dictation; interval drill.

Music 29b. Beginning Sight Singing and Ear Training II. **Two hours.**
Prerequisite: Music 29a.
More difficult sight singing and tonal dictation; simple harmonic recognition; complex rhythms.

Music 29c. Beginning Sight Singing and Ear Training III. **Two hours.**
Prerequisite: Music 29b.
Continuation of Music 29b.

UPPER DIVISION COURSES

(Open only to Junior, Senior, and Graduate Students)

Music 34. Methods of Teaching Music Appreciation. **Two hours.**
Music for little children; mimetic activities; rhythm band; free rhythmic expression; directed rhythmic expression; story telling music; music for quiet listening; bibliographies of helpful materials about music and composers; types of phonographs and recordings; records suitable for presentation in each grade; integration of music with the units of work in the general subjects.

Music 37a. Music History I. **Two hours.**
Archaic and medieval music; organization of church music, music of the Renaissance and Reformation; music of Elizabethan England; early classical composers; Bach, Handel, Haydn, and Mozart.

Music 37b. Music History II. **Two hours.**
Romanticism in music; the Romantic opera; development of piano music; the art song; Beethoven; Schubert; Schumann; Chopin; Liszt; Wagner.

Music 37c. Music History III. **Two hours.**
Late Romantic and national trends in music; modern music; Impressionism; atonality; Debussy; Ravel; Hindemith; Stravinsky; jazz influence in American music; Harris; Gershwin, etc.

Music 38a. Advanced Harmony I. **Two hours.**
Prerequisite: Music 29c.
Extraneous modulation; secondary chords of the seventh; analysis of sonatas of Haydn and Mozart; study of melodic and harmonic development.

Music 38b. Advanced Harmony II. **Two hours.**
Prerequisite Music 38a.
Chords of the Neopolitan sixth; augmented sixth; modulation through use of the diminished seventh chord; analysis and memorizing a Bach choral; writing a sonata, allegro form.

Music 38c. Advanced Harmony III. **Two hours.**
Prerequisite: Music 38b.
Embellishment and reduction of melodies; modulation to distant keys; original work to fit the student's need.

Music 39a. Advanced Sight Singing and Ear Training I. **Two hours.**
Continuation of Music 29c.

Music 39b. Advanced Sight Singing and Ear Training II. **Two hours.**
Prerequisite: Music 39a.

Music 39c. Advanced Sight Singing and Ear Training III. **Two hours.**
Prerequisite: Music 39b.

Music 41ab. Grade Methods and Materials. **Two hours.**
Prerequisites: Music 25ab and 18.
The teaching and supervision of music in the grades.

Music 42. Conducting. **Two hours.**
Prerequisites: Music 25ab and Music 18, or the equivalent.
Technique of the baton; tempo; attach; release; phrasing; dynamics; seating of the chorus and orchestra; discipline of rehearsals; community music.

Music 43a, 43b, 43c. Teaching of Piano in Classes. **Two hours.**
Prerequisites: Music 11g, 11h, 11i.
Methods of teaching piano in classes; observation and practice teaching; The Oxford Piano Course, supplemented by material from the works of John Thompson, Dorothy Gayner Blake, Leon Iltis, Bernice Frost, etc.

Music 44a. Band and Orchestra Procedures and Materials. **Two hours.**
Analysis and organization of various courses of study for instrumental groups of varying abilities; rehearsal routines; training student sectional leaders; duties which may be assumed by students; adaptation of practice quarters to fit acoustical needs; program mechanics for public appearances; publicizing and interpreting music activities; care of equipment; program and teaching materials; consideration of the modified Prescott system and similar courses of study.

Music 44b. Band and Orchestra procedures and Materials. **Two hours.**
Continuation of Music 44a.

Music 48a. Counterpoint I. **Two hours.**
Prerequisites: One year of Harmony and an elementary knowledge of piano playing.
Strict counterpoint, two and three voices in all species; original polyphonic writing based on a study of the Invention and the Canon.

Music 48b. Counterpoint II. **Two hours.**
Prerequisite: Music 48a.
Four part counterpoint in all species; original composition based on study of the Motet and the Madrigal.

PHYSICAL EDUCATION

LOWER DIVISION COURSES

Physical Education 10. Fundamental Physical Education Activities. **One-half hour.** Fee, 50c.
To promote the development of physical efficiency and skills. The course is divided into sections as indicated below:

Physical Education 10-a, Elementary Tumbling and Aparatus.
Physical Education 10-b, Elementary Swimming.
Physical Education 10-c, Fundamentals of Touch Football.
Physical Education 10-d, Fundamentals of Basketball.
Physical Education 10-e, Fundamentals of Softball.
Physical Education 10-f, Fundamentals of Volleyball.
Physical Education 10-g, Fundamentals of Tennis.
Physical Education 10-h, Fundamentals of Handball.
Physical Education 10-i, Fundamentals of Boxing and Wrestling.
Physical Education 10-j, Fundamentals of Badminton and Aerial Dart.
Physical Education 10-k, Fundamentals of Shuffleboard, Paddle Tennis and Table Tennis.
Physical Education 10-l, Folk Dancing and Singing Games.

Physical Education 10-m, Clogging.

Physical Education 10-n, Archery.

Physical Education 10-r, Riding and Horsemanship.

Physical Education 11. Introduction to Physical Education. **Two hours.**
Place of physical education in general education and American life; consideration of comparative physical education.

Physical Education 20. Plays and Games for Elementary Grades. **Two hours.**
Materials, methods and practice in physical education activities suitable for children in the elementary school.

Physical Education 21. Games and Sports for the Secondary School. **Two hours.**
Physical education activities suitable for junior and senior high school students.

Physical Education 24. Coaching Baseball. **Two hours.**
Theory and practice in coaching the fundamentals of baseball; team offense and defense.

Physical Education 25. Clubcraft. **Two hours.**
National girls' organizations such as Girl Scouts, Camp Fire Girls, Girl Reserves, and 4H Clubs; leadership and organization of clubs.

Physical Education 26. Scouting and Clubcraft. **Four hours. Fee, 50c.** (Men.)
History and principles of scouting; practical scoutcraft and clubcraft. The scoutmaster's certificate is awarded to those completing the course.

Physical Education 27. Softball and Tennis Coaching Fundamentals for Women. **Two hours.**
Theory and practice of techniques and teaching procedures of softball and tennis for women. Also lead-up games for these sports.

UPPER DIVISION COURSES

(Open only to Junior, Senior, and Graduate Students)

Physical Education 30. Folk and National Dancing. **Two hours.**
Traditional and social dances of the United States and other countries.

Physical Education 31. Kinesiology. **Two hours.**
Fundamentals of body mechanics; movements of the human body.

Physical Education 32. Physiology of Activity. **Two hours.**
Effects of physical education activities on the various systems of the human body.

Physical Education 34. Advanced Physical Training Activities. **Two hours. Fee, 50c.**
Prerequisite: Physical Education 10a.
Advanced tactics; drills for demonstrations; pyramid buildings; tumbling; apparatus; opportunity for leadership and observation.

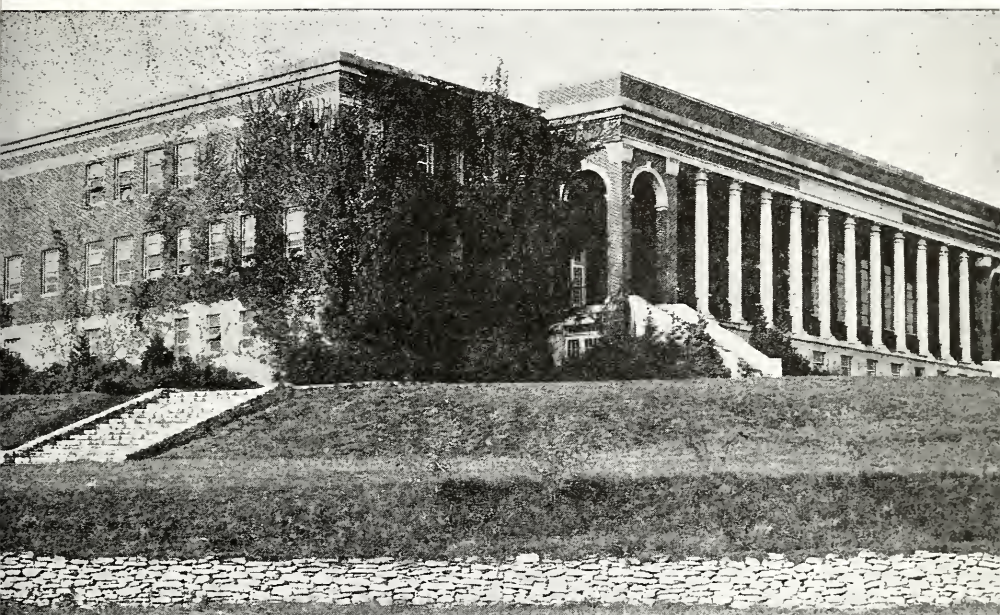
Physical Education 35a, 35b. Modern Dance. **Two hours.**
Modern dance and the fundamentals of movement and rhythm; dance composition.

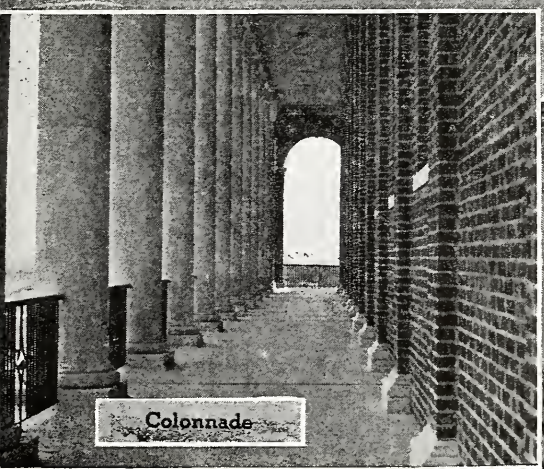
Physical Education 36. Materials and Methods for Teaching Physical Education. **Two hours.**
Theories of play; study of existing play programs; correlation with other subjects; games, skills, lesson planning and observation.

Physical Education 37. Coaching Basketball. **Two hours.**
Theory and practice in coaching the fundamentals of basketball; team offense and defense.

Locker Room

The Indoor Pool





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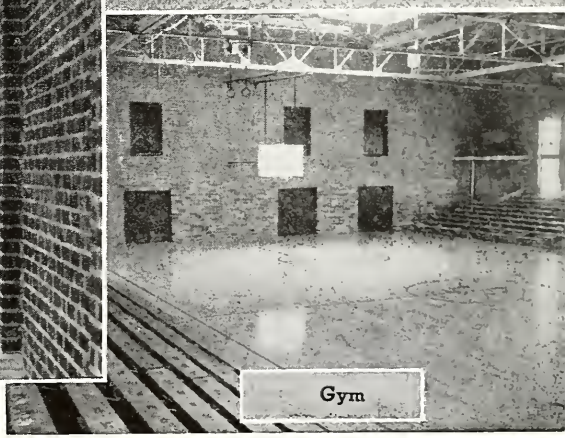


Gym

Physical Education 38. Basketball and Volleyball Coaching for Women. **Two hours.**

Theory and practice of techniques and teaching procedures of basketball and volleyball for women; lead-up games for these sports.

Physical Education 39. Coaching Track and Field. **Two hours.**

Theory and practice in coaching fundamentals involved in track and field.

Physical Education 40. Community Recreation. **Two hours.**

The problem of leisure; vacation time for children; adult recreation; content of school programs for leisure education; physical education; dramatics; reading; music; art and handcrafts; nature study; extracurricular activities.

Physical Education 42. Coaching Football. **Two hours.**

Theory and practice in coaching the fundamentals of football; team offense and defense.

Physical Education 46. Administration and Organization of Physical Education. **Four hours.**

Policies and procedures of administration on the elementary and secondary school level. Special emphasis on construction and care of facilities, equipment, and supervision of personnel

RECOMMENDED CURRICULUM FOR A MAJOR IN PHYSICS

(B. S. Degree with right of teaching certificate)

First Year

1st Quarter	Hrs.	2nd Quarter	Hrs.	3rd Quarter	Hrs.
Chem. 11	4	Chem. 12	4	Chem. 13	4
Eng. 10a	3	Eng. 10b	3	Eng. 10c	3
Math. 10	4	Lib. Sci. 10	1	Hlth. 26	4
Ph. Ed. 10	½	Math. 11	4	Math. 12	4
Soc. 10	1	Ph. Ed. 10	½	Ph. Ed. 10	½
Elect.	4	Elect.	4	Elect.	2
	16½		16½		17½

Second Year

Eng. 21a	4	Eng. 21c	4	Math. 23	4
Math. 21	4	Math. 22	4	Ph. Ed. 10	½
Ph. Ed. 10	½	Ph. Ed. 10	½	Phys. 22	4
Phys. 17	1	Ph. Ed. 21	2	Elect.	8
Phys. 20	4	Phys. 21	4		
Elect.	4	Elect.	3		
	17½		17½		16½

Third Year

Biol. 10	4	Biol. 11	4	Biol. 12	4
Educ. 21	4	Educ. 30 or 41	2	Phys. Elect.	4
Math. 32	4	Educ. 36	6	Elect.	8
Phys. Elect.	4	Phys. Elect.	4		
	16		16		16

Fourth Year

Educ. 46	16	Phys. Elect.	4	Phys. Elect.	8
		Elect.	12	Elect.	8
			16		16

Electives must be selected to meet the 40 hour general requirement as outlined in the section on Curricula, Degrees, and Certificates under the subheading The Provisional High School Certificate.

Recommended Curriculum for a Second Major in Physics

A student with a first major in some other department may take the following courses for a second major in Physics: 17, 20, 21, 22, and 24 hours elective.

Minor

A student with a major and a minor in other departments may take the following courses for a minor in Physics: 17, 20, 21, 22, and 12 hours elective.

Recommended Curriculum for a Major in Physics Without Right of Teaching Certificate

The general education requirements outlined under the heading of Curricula, Degrees, and Certificates must be met. A curriculum will be furnished upon request.

PHYSICS

LOWER DIVISION COURSES

Physics 10. Household Physics. **Four hours.**

Open only to students majoring in home economics.

Forces and their effects; work energy and power; elementary machines: heating, refrigeration, and air conditioning; principles of electricity, sound and light; applications in the home and community such as the telephone, radio, talking pictures, transportation, transmission of pictures, and automatic controls.

Physics 11. Introduction to Physics. **Four hours.** Fee, $1.00.

This course and its companion course, Physics 12, are designed for students whose mathematical background has been neglected. They do not meet the engineering or medical school requirements. Students, who have had high school physics or Science 12, should elect Physics 20, 21, and 22.

The course will consider the principles of mechanics, heat and sound.

Physics 12. Introduction to Physics. **Four hours.** Fee, $1.00.

The general subjects are light, elementary astronomy, electricity, electronics and elementary atomic physics.

Physics 16. Elmentary Photography. **Two hours.** Fee, $1.00.

Historical background; elementary photographic optics; defects of lenses; camera parts and accessories; camera testing; film sensitivity and exposure; development of negatives; fixing and washing of negatives; contact printing; photography of colored objects; photography of moving objects; use of artificial lights; reproduction; projection printing; composition; finishing the print; toning of prints; natural-color photography; lantern slides and transparencies.

Physics 17. Slide Rule Theory and Practice. **One hour.**

Designed to aid the student in doing arithmetical computations rapidly.

Physics 20. Mechanics and heat. **Four hours.** Fee, $1.00.

Prerequisites: Mathematics 10, 11, and registration in Mathematics 12.

Statics; kinetics; gravitation and falling bodies; work, energy, power, and friction; motion in a circle; rotation of a body; elasticity; hydrostatics; mechanics of gasses; fluids in motion; surface tension and capilarity; temperature; expansion; heat measurements; changes of state; heat and energy; propagation of heat.

Physics 21. Wave Motion, Sound, and Light. **Four hours.** Fee, $1.00.
Prerequisite: Physics 20.

Waves; sound and its transmission; properties of sound; acoustics; the physical basis of music; production of tones; light sources; reflection; refraction; optical instruments; dispersion and spectra; interference of light; diffraction; polarized light; color; sources of light; optical phenomena in nature.

Physics. 22. Electricity and Corpuscular Physics. **Four hours.** Fee, $1.00.
Prerequisite: Physics 20.

Magnetism; electrostatics; electrodynamics; the electrical current; batteries and thermacouples; electrical measurements; electro-magnetism; induced currents; electrical machinery; electrical oscillations, electrical discharges; thermo- and photo-electric emission; x-ray and related phenomena; atomic structure; radio-activity.

Physics 23. Problems in General Physics. **Two hours.**
Prerequisites: Physics 20, 21, 22 or registration in Physics 22.
Problems selected from topics in Physics 20, 21 and 22.

UPPER DIVISION COURSES

(Open only to Junior, Senior, and Graduate Students)

Physics 30. Modern Physics. **Four hours.**
Prerequisites: Physics 20, 21, 22, Mathematics 22 and 23, or registration in Mathematics 23.

Nature of matter, electricity, and radiant energy; spectroscopy; x-rays.

Physics 31. Modern Physics. **Four hours.**
Prerequisites: Physics 20, 21, 22, Mathematics 22 and 23, or registration in Mathematics 23.

Molecular structure; radioactivity; atomic theory; relativity; astrophysics.

Physics 32. Introduction to Physical Optics. **Four hours.**
Prerequisites: Physics 20 and 21.

Wave motion; reflection and refraction; further study of lenses; the telescope; dispersion; facts concerning the spectrum; interference; diffraction; plane polarized light; the electromagnetic theory of light; the quantum theory and origin of spectra; the dilemma.

Physics 33. Heat. **Four hours.**
Prerequisites: Physics 20, 21, 22, Mathematics 22.

Historical review of theories and discoveries; thermometry; specific heats; thermal expansion; transfer of heat; first law of thermodynamics; radiation; change of state; continuity of state; introduction to thermodynamics; production of low temperatures; production of high temperatures.

Physics 34a. Electricity and Magnetism. **Four hours.**
Prerequisites: Physics 22, Mathematics 32 or registration in Mathematics 32.

Electrical magnetic field; potential; capacity; theory or dielectrics; electrical images; measurement of current; measurment of resistance; measurement of potential; current and magnetic field; the ballistic galvanometer; iron and the magnetic circuit; direct current dynamo machines; current in inductive circuit; measurement of inductance and capacity; units and dimensions.

Physics 34b. Electricity and Magnetism. **Two hours.**
Prerequisite: Physics 34a.

Alternating current meters; alternating current networks; alternators; transformers; transmission and distribution of power; conduction of gases; electromagnetic waves; electrical communications; thermoelectricity; radioactivity and the structure of matter.

Physics 35. Sound. **Four hours.**
Prerequisites: Physics 20, 21, 22, and Mathematics 22.
Theory of vibration; vibrating systems and sources of sound; reception, transformation, and measurement of sound energy; technical applications.

Physics 36. Electronics. **Four hours.** Fee, $1.00.
Prerequisite: Physics 34a, registration in 34b.
Theory of thermionic tubes; amplifier circuit principles; photosensitive devices; rectifiers; principles of radio, radar and television.

Physics 37. Electrical Measurements. **Two hours.** Fee, $1.00.
Prerequisite: Physics 34, or registration in Physics 34.
Experiments selected to supplement the theory of Physics 34.

Physics. 40. Intermediate Mechanics. **Four hours.**
Prerequisites: Physics 20, 21, and Mathematics 32.
Review of elementary concepts; rectilinear motion; curvilinear motion; particle of dynamics from the point of view of energy; statics and dynamics of particles and larger bodies.

Physics 41. Advanced Mechanics. **Four hours.**
Prerequisite: Physics 40 and Mathematics 32.
Dynamics of rotating bodies; constrained motion; oscillations; deformable bodies and wave motion; mechanics of fluids.

PSYCHOLOGY

Psychology 20. General Psychology. **Four hours.**
Preview of psychology; factors in development; motivation; emotions; learning; the management of learning; thinking; personality and individual differences; intelligence; vocation and employment psychology; getting along with people; psychology and social problems.

NONSPECIALIZED SCIENCE

LOWER DIVISION COURSES

Science 10. Survey of Physical Science. **Four hours.**
Not open to students who have had one or more laboratory courses in Chemistry.
Matter and energy; states of matter; common types of substances; common chemical processes; things made by man; man's essentials; earth science; weather; the heavenly bodies.

Science 11. Survey of Biological Science. **Four hours.**
Not open to students who have had one or more laboratory courses in Biology.
Structural organization and chemical composition of living things; reproduction; genetics; variation; respiration; nutrition; maintenance of health.

Science 20. Materials and Methods of Teaching Science in the Elementary School. **Four hours.**
Study of science topics appropriate for the elementary grades; preparation of units of science for use in the elementary grades; observation of teaching in the training school; conferences with teachers in the training school; field trips; securing free and inexpensive materials for class use; collection and preservation of specimens; other visual aids.

UPPER DIVISION COURSES

(Open only to Junior, Senior, and Graduate Students)

Science 35. The History of Science. **Four hours.**

The development of scientific concepts through the ages; the contributions of science to civilization; relations of scientific developments and various philosophies; biographical sketches.

Science 45. Materials and Methods of Teaching Science in the Secondary Schools. **Four hours.**

Selection of textbooks, manuals, supplementary readings, etc.; organization of laboratory space and purchasing of equipment; making simple equipment; securing free and inexpensive material; preparation and presentation of work units; visual aids; science demonstrations; test construction and administration; club-work; specimen collection and preservation; observation in Model High School.

SOCIOLOGY

LOWER DIVISION COURSES

Sociology 10. College Orientation. **One hour.**

The college and its functions; living in college; the development of efficient study habits; personal and family responsibilities; social relationships; vocational guidance.

Sociology 14. Rural Sociology. **Four hours.**

Historical backgrounds, movements, resources, and problems of rural communities; rural-urban relationships; rural people; problems of rural youth; agriculture and its problems of adjustment; community organizations and institutions; adult education; public health, rural recreation, and social welfare; community organization and local government; relationship of the school to other institutions and agencies of the rural community; location and use of educational materials and resources in the community; state and national policies for the improvement of rural society.

Sociology 20. Social Understandings. **Four hours.**

The meaning of "social understandings"; the community and the community process; community surveys; the study of specific social problems, groups, and institutions as they relate to the community process.

UPPER DIVISION COURSES

(Open only to Junior, Senior, and Graduate Students)

Sociology 30. Introduction to Sociology. **Four hours.**

Field of sociology and its relation to other social science courses; relation of living conditions to life; the problem of finding and using leaders; social achievements; man's relation to his institutions and his responsibility for them; the family; religion; and morals.

Sociology 31. Current Social Problems. **Four hours.**

The social and institutional impact of industrialism and secularism; economic, social, and biological problems in modern society; social wreckage.

Sociology 33. Criminology, Penology, and Reform. **Four hours.**

Causes of crime; heredity and environment; costs of crime; punishment and correction of criminals; special attention to juvenile delinquents and correctional methods.

Sociology 35. The Meaning of Total War. **One hour.**

Basic economic problems; human and material resources; human

geography in the air age; the problem of civilian defense; health problems; nutrition and welfare; mobilization of manpower; financing the war effort; price control, priorities, rationing, etc.; changing educational patterns; social dislocations and post-war problems.

SPANISH

A student with a major and a minor in other departments may take 24 quarter hours for a minor in Spanish.

LOWER DIVISION COURSES

Spanish 11. Elementary Spanish. **Four hours.**
Grammar; pronunciation; reading of easy Spanish.

Spanish 12. Elementary Spanish. **Four hours.**
Prerequisite: Spanish 11 or one unit of high school Spanish.

Spanish 21. Intermediate Spanish. **Four hours.**
Prerequisites: Spanish 11 and 12 or two units of high school Spanish.
Review of grammar; intensive work on studies of Spanish speaking countries as a basis for spoken Spanish.

Spanish 22. Intermediate Spanish. **Four hours.**
Prerequisite: Spanish 21 or three units of high school Spanish.
Foundation work for advanced study in literature and intensive study of spoken Spanish.

UPPER DIVISION COURSES

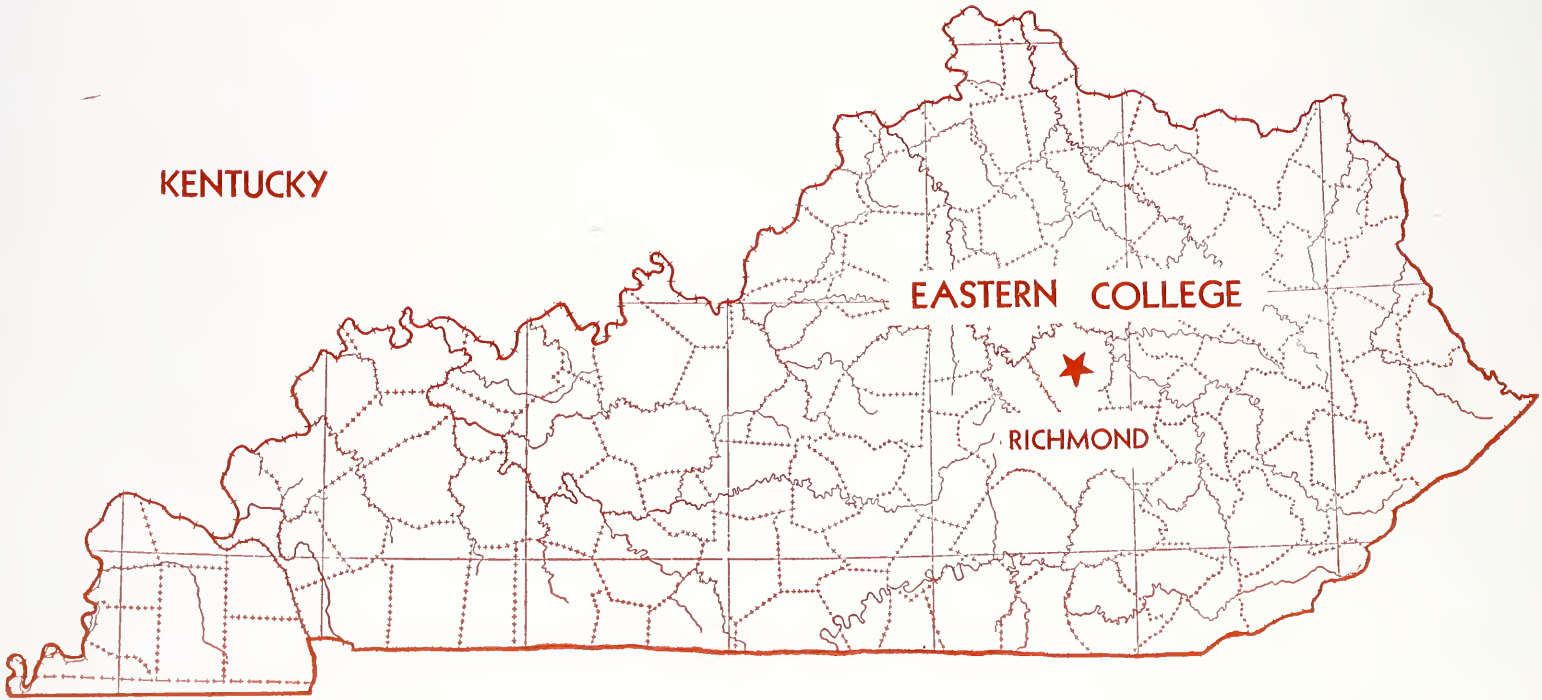
(Open only to Junior, Senior, and Graduate Students)

Spanish 31. The Spanish Novel. **Four hours.**
Prerequisite: Two years of college Spanish or the equivalent.
Reading of selected novels of the Golden Age and of the eighteenth century.

Spanish 32. The Spanish Novel. **Four hours.**
Prerequisite: Spanish 31 or its equivalent.
Novels of the nineteenth and twentieth centuries.

Spanish 41. Spanish poetry. **Four hours.**
Prerequisite: Two years of college Spanish or the equivalent.
Selected poems by writers throughout the world using the Spanish medium.

Spanish 42. Spanish Drama. **Four hours.**
Prerequisite: Spanish 41 or its equivalent.
Representative plays of the various schools of drama.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